FEB 9 1925 Medical Lib.

CLINICAL MEDICINE

A MONTHLY POSTGRADUATE COURSE

February, 1925 Vol. 32, No. 2

LEADING ARTICLES

The Public Health Service of the United States
By Hugh S. Cumming, M.D., Washington, D.C.

The Relationship of Asthma to Hayfever
By Burton Haseltine, M.D., Chicago

Evidences of Pathology and Postural Defect from Feet and Shoes
By Charles Cross, M.D., San Francisco

Relation of Nasal Conditions to Eye Diseases
By J. Ivimey Dowling, M.D., Albany

Intellectual Ankylosis
By W. V. Gage, M.D., Worland, Wyoming

The Seven Wonders of the Medical World
By William Thackeray, M.D., Fowlerton, Texas

Colitis
By Charles J. Drueck, Chicago

Vincent's Angina Developing During Arsenical Treatment for Syphilis
By Robert E. Jameson, M.D., Davenport, Iowa

A specific treatment for pneumonia

Morgenroth's chemotherapeutic specific ethyl hydrocupreine is now available for the use of physicians under the name of

Numoquin Base

ETHYL HYDROCUPREINE MERCK

Descriptive literature sent upon request to

MERCK & CO., New York

In diseases of the BILIARY TRACT—prescribe

Ago-Cholan

Ago-Cholan (strontium cholo-salicylate) is a potent stimulant and antiseptic for the treatment of biliary and hepatic disorders and the prevention of gallstones.

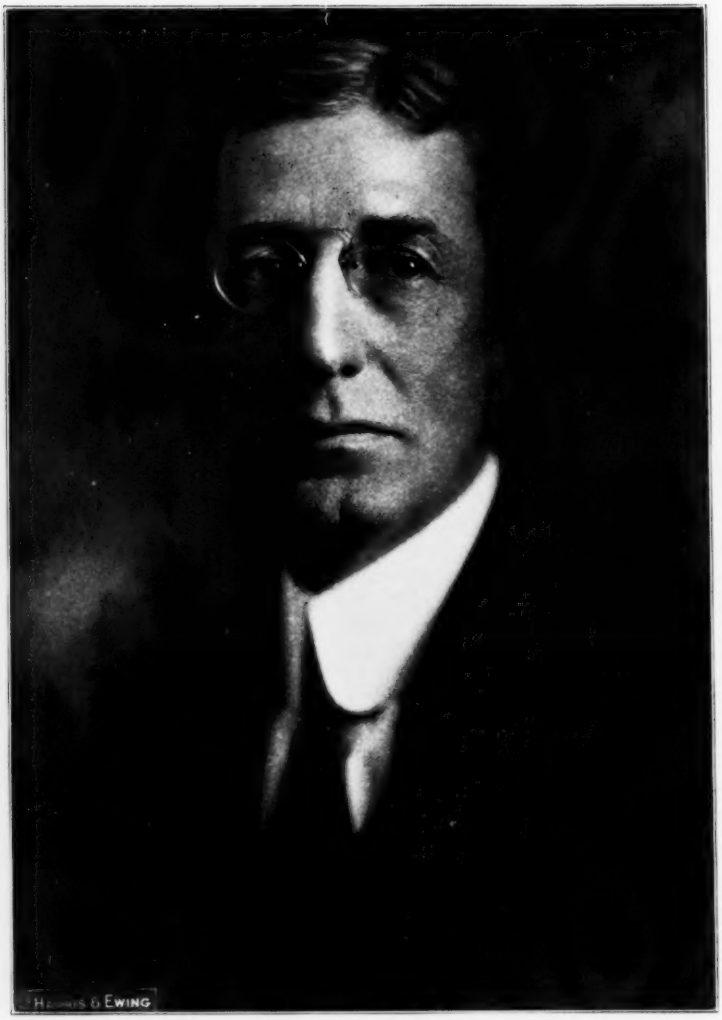
DOSE: Two tablets two or three times a day after meals.

For Sale by
MERCK & CO.
New York St. Louis

Two-grain sugar-coated tablets.
Tubes of 20—vials of 50.

Literature and Samples from
E. BILHUBER, Inc.
25 West Broadway New York

UNIV. OF MICH.



HUGH S. CUMMING, M.D.

SURGEON GENERAL, UNITED STATES PUBLIC HEALTH SERVICE

CLINICAL MEDICINE

A Monthly Postgraduate Course

Vol. 32, No. 2 February, 1925

Surgeon-General Cumming

HUGH S. CUMMING was born at Hampton, Virginia, August 18, 1869. He was educated in the public and private schools, Baltimore City College and the University of Virginia.

He was graduated in medicine from the University of Virginia in 1893, and commissioned in the Public Health Service May 25, 1894, after which he served in the various marine hospitals of the Public Health Service throughout the United States.

He took a course in the Public Health Service Laboratory, and engaged in the suppression of epidemics of yellow fever and smallpox in the Southern states and later served as medical officer in charge of the immigration station at Ellis Island.

Dr. Cumming volunteered for service in the Spanish-American War, serving at the yellow fever quarantine station at Montauk Point. He was stationed at the South Atlantic quarantine from 1899 to 1901; at San Francisco from 1901 to 1906; in charge of service activities in Japan and China from 1906 to 1910, studying epidemics of cholera and bubonic plague in the Orient.

From 1910 to 1912 he was Chief Quarantine Officer at Hampton Roads Quarantine, and was in charge of the investigation of pollution of tidal waters, Atlantic coast, from 1914 to 1917.

During the World War he was detailed as Advisor in Sanitation, United States Navy, from the outbreak of the war until November, 1918, and was sent to Europe by order of the President, to investigate the sanitary conditions of the troops. After the return of troops from France, he investigated sanitary conditions in the ports of Europe and the areas from which emigration would occur to this country.

Dr. Cumming has held the positions of Advisor in Sanitation to League of Red Cross Societies; member of the Conference at Cannes to organize the League sanitary work; official representative of the American Government to the *Office International d'Hygiene Publique*, and to the meeting for the revision of the Convention at Rome, in 1919 and 1920. He was also a member of the International Conference called by the British Foreign Office for organization of the League of Nations sanitary affairs, and president of the Inter-Allied Medical Mission to Poland in 1919.

He was nominated by the President as Surgeon-General, U.S.P.H.S., while in Constantinople, in January, 1920, and assumed his duties as such on March 10, 1920, since when he has served as representative of the United States Government at meetings of *Office International d'Hygiene Publique*, at Paris and as a member of the American delegation to the Seventh Pan-American Sanitary Conference at Havana, Cuba.

CRAMPED THINKING

We give place to no one in the matter of reverence for the dicta of genuine authorities in medicine, or in any other field of thought. These great men have arrived at their positions of distinction by means of original and constructive thinking, and are therefore entitled to our attentive consideration when they speak; but, we should never allow their position to hamper us in doing a little original and constructive thinking on our own account, by which means, alone, is there any possibility that we, ourselves, will ever be considered an authority on any subject.

It is not the great minds who have blazed the trails for the progress of modern science and thought who would attempt to limit the scope of thinkers who come after; it is the lesser men, who have accepted the conclusions of the leaders as a *ne plus ultra*, and are ready to cry shame upon any who would attempt to amplify these conclusions and carry them further.

No man can *do* that of which he is unable to *dream;* and no great original research work is possible to any man whose imagination is defective or restricted, or who thinks in tight little hide-bound circles. In order to open up new paths, a man must recognize that, although the work of his predecessors was of the utmost importance, they were not omniscient, and there may be more to learn. Harvey's studies of the circulation of the blood revolutionized the entire concept of the physiology of that great organ; but Harvey did not know, or pretend to know, all that there is to be known about the blood or its circulation. There are problems along this line to be solved, even to this day.

Columbus, no doubt, viewed with respect the teachings of the authorities of his days, but he refused to let that fact hamper the sweep of his glorious imagination, and his name is now a household word, while theirs are forgotten.

While remembering and giving thanks for the enormous strides which have been made, in the last four or five decades, in the medical sciences, let us not lose sight of the fact that the way we have yet to travel is infinitely longer than the way we have already come, and that the achievements of the future will be made by the men who have freed themselves from constricted thinking and permitted their God-given faculities a chance to range over new pastures.

On page 88 of this issue, Dr. Gage has called attention to some of the interesting and, perhaps, vital problems whose solution still lies before us. He does not pretend to answer his own questions. When the answers are found, it will be because a number of men have had the intellectual freedom to *investigate*, and *record* the results of their investigations.

You will not all agree with everything he has to say. We do not agree with it all, but it interests us. Some of you may be inclined to laugh at certain statements of his; it is easy to laugh at what is unfamiliar —they laughed at Copernicus and Galileo. We hope that not many of you will laugh. In any case, unless contracture and ossification of the occipito frontalis has set in, the article will set you to thinking, and, if enough of you not only think but investigate and record, we may arrive at a solution of some of these problems sooner than we now think.

We do hope and expect that Dr. Gage's article will arouse some lively discussion. Write and tell us what you think of his ideas, and we will take great pleasure in publishing the most thoughtful and constructive of the comments which we receive.

THE ECONOMIC SITUATION

The doctor is a human being, who has to eat and be clothed and sheltered; and he depends upon the financial rewards of his professional services, which, in turn, are in relation to the incomes of his patients, for his ability to do these things. As he is also a member of the general body poli tic, whose welfare is the sum of the conditions in which he and others, more or less like him, find themselves, he cannot be oblivious to the general economic trends which are observable throughout the United States.

The general financial outlook at the beginning of the year, as reported by the National City Bank, of New York, and by Arthur Sears Henning, the Washington financial correspondent of the Chicago *Tribune*, is very bright, and the prospects for a busy and prosperous year have seldom been better.

The commodity price index, based on 200 commodities in general use, and the cost-of-living figures are the same as a year ago. This means prosperity and *paying ability* for the merchant and manufacturer.

The prices received by the farmer for his products are far higher than last year, and

the prices he must pay for the things he uses have been materially reduced. All crops except corn have been large. This means *paying ability* for the agricultural worker.

None of the major industries has reached 100 percent production, so that the danger of inflation seems remote. On the other hand, steel production, which is taken as the index of industrial activity, is 83 percent of capacity with a steady increase in progress and there is little or no involuntary unemployment. This means *paying ability* for the industrial wage earner.

With all the various classes of people upon whom the professional man depends for his living in such a favorable economic situation, the prospects are bright that the physicians will be kept busy and will be promptly paid for their services.

People with money want service, and are willing to pay for it, but the greater their ability to pay, the more exacting are their requirements as to the *quality* of the service they receive for their money. It therefore behooves every physician to rouse himself and set about qualifying himself to render the kind of services for which his patients will pay, freely and cheerfully.

Most of the shadows of this life are caused by standing in our own sunshine.—Emerson.

ASTHMA

Knowing so well, by personal experience, how physicians have long been groping in semidarkness to find a cure, or even a hope of relief for the numerous ones among their patients whose lives are made a burden by the vitality-destroying but rarely fatal (sometimes the patients wish it were more certainly and quickly mortal) symptom-complex known as "asthma," we are trying to give them all the light on the subject which is available.

The series of articles by Haseltine and La Forge, which it now being published, seems to give a wider view of the subject than we have heretofore seen, and the paper, by Haseltine, on page 77 of the present number, adequately discusses the relations existing between asthma and hayfever.

Much has been said in these articles about the relation which nasal pathology bears to asthma and about the Dowling treatment (there will be more regarding that, and other phases of the rhinological treatment of this disease in the March number); so, it is a pleasure to be able to offer you an article by Dowling (on p. 85), dealing with some other aspects of nasal pathology.

It may appear to many that the Haseltine-La Forge series is giving us the last word on this subject; but, even these authors, themselves, admit the question is still *sub judice*, and therefore the reference made to this disease in the article by Dr. Gage, elsewhere noted, may shed further light.

The entire subject is such a large one, and depends so much for its adequate solution upon the accumulation of clinical reports from many workers, that we hope every reader will give us the benefit of his experiences in the handling of cases of this disease.

Give us courage and gaiety and the quiet mind. Spare us to our friends; soften us to our enemies. Bless us, if it may be in all our innocent endeavors.—Stevenson.

THE TECHNIC OF LIVING AND LOVING

There are those who maintain that, so long as a man's heart continues to beat, he is alive. We maintain that there are many cases where a being is alive as an *animal*, but has ceased to live as a *man*.

There are others who feel that life is a burden—a weary round of meaningless duties, without background or purpose—and wonder whether it is worth while. We maintain that such have *never lived*, in the truest and fullest sense.

No tyro ever takes the highest pleasure in his work; but, look at the experts, from a good prize-fighter to our Edisons and Burbanks! The expert always finds his richest and most satisfying joys in the exercise of his skill, and by that joyous exercise his skill grows greater, so that a beneficent circle is formed.

Whenever any action is to be performed, from the simplest to the most complicated, a certain amount of skill is required to perform it, and the acquirement of that skill constitutes the technic of the activity, whether it be planting potatoes or playing the violin.

Life and love are made up of an enormously complicated series of activities, and, like all other activities, are susceptible of enormous development by the acquirement of their technic; which acquirement renders their practice much smoother and easier and infinitely more enjoyable and profitable, to ourselves and to all with whom we come in contact.

Some will object that, while there are

textbooks setting forth the technic of almost all of the limited fields of human activity, there are none dealing with the broad, general subjects of life and love. Fortunately, such an opinion is erroneous. There are numerous textbooks on both these great subjects. To mention only a few, there are such books as Herbert Spencer's "Essays on Education"; Emerson's Essays on "Compensation" and "Friendship"; many of the Essays of Arnold Bennett and Frank Crane, and Basil King's "Conquest of Fear," dealing with the technic of living; and Havelock Ellis' "Little Essays of Love and Virtue" (reviewed in the department of NEW BOOKS, in this issue), as well as many of his other writings, and Dr. Long's "Sane Sex Life and Sane Sex Living," dealing with the technic of loving.

If more of us would devote even a small amount of time to the systematic and purposeful study of these great occupations in which we are all engaged, life could be changed, at least for such students, from a drab and unprofitable interlude between two realms of darkness, to an exquisite and profitable art, whose practice would lead to incalculable joy for the practitioner, and immeasurable amelioration of the condition of the world in general and its inhabitants in particular.

Talent means the ability to do well what others have done already, while genius means the ability to do something new.—Havelock Ellis.

ENFORCING THE LAWS

In modern commonwealths, where kings and absolutism are at a discount, much is being said upon the "consent of the governed" which is claimed to be an essential feature of an enlightened form of government. Incidentally, the consent of the governed is stressed mainly by those wilful dissenters who, always in the minority, yet want to foist their own little ideas upon the entire people, whether it be through noisy, blatant demagogic means or through chicanery and unfair tactics. These "conscientious objectors" make much capital out of the plea that restrictive laws infringe upon the "personal liberty" of the individual, being unmindful of the fact that there is no such thing as personal liberty apart from the liberty of the community in which we live. The gospel of liberty was preached in the French Revolution at the price of thousands who displeased the few in power. It is the bait of the Russian Communists who have dragged their country into a worse mire than it ever knew even during the darkest time of imperial autocracy.

The consent of the governed means, naturally the consent of the majority. Fortunately, the majority rarely yields to mad mass-impulses. Commonly it is "safe and sane" even though it may be deadly dull in its "Potterism."

That there always is much dissent among the governed, goes without saying. The educational provisions, having for their object the training of the future citizens of the commonwealth, are accepted by school children only under compulsion. Even the older students seem to delight in running counter to orders and to express their dissent vigorously. The customs' regulations, which are designed to promote the home industries and also to provide much needed revenue for government expenses, are flagrantly violated by people who would resent energetically being called lawbreakers. The demands of the laws regulating the federal income tax are sidestepped by those, principally, who are best able to pay large taxes, through the perfectly legal (if not very legitimate) expedient of nontaxable investments. The police rules and regulations for the control of auto traffic are broken habitually, especially in the matter of speed, by perfectly respectable people. The manner in which the Eighteenth Amendment to the Constitution is constantly NOT observed, is notorious. Nor are criminals the worst offenders. These are found among *nice* people of all classes who have come to look upon restrictive laws as matters to be ignored.

It is self-evident that this habit of ignoring the laws, whenever they happen to displease us or to be irksome, is replete with possibilities for untold evil and that it must reflect unfavorably upon the children of today who are the men and women of tomorrow. When open and vociferous objection to the law affects provisions for the public welfare, for the prevention of epidemics and for the lessening of the mortality from preventable diseases, it assumes a very serious aspect and threatens to carry us backward, in some respects, to the dark ages of non-activity in affairs, the importance of which can be denied only by the ignorant or the wilfully blind.

Objections to the lessons of modern medical research have become increasingly insistent of late years. Cults and societies on every side have arisen, striving by every known means to break down the bar-

riers that years of scientific investigation and endeavor have set up against disease. The present-day concepts as to the origin and nature of communicable disease, and regarding the means for their prevention, at least in epidemic form, are being fought and resisted by well-meaning, high-minded, but woefully misinformed persons who hold that modern means of disease-prevention are wrong, that epidemic diseases have become less because of improved sanitation; ignoring with delightfully naive perversity the fact that improved sanitation itself is the outcome of these same modern methods of study leading to scientific disease-prevention.

That it would be fatal for the authorities of any commonwealth to listen to these false prophets and to neglect the stringent prophylactic measures now in force, has been demonstrated time and again, especially in the matter of smallpox epidemics, but also with respect to other infectious diseases. The Society of Friends of Medical Progress, Inc., a national lay society, has taken steps to guard against the danger that threatens our national welfare. This society was organized in order to encourage and aid all research and humane experimentation for the advancement of medical science; and to inform the public of the truth concerning the value of scientific medicine to humanity and to animals.

"Life is a grindstone that either sharpens a man or wears him out, depending on the kind of stuff he is made of."

WHY IS THERE LESS TUBERCULOSIS?

Twenty-five years ago there were 200 deaths from tuberculosis every year in each 100,000 of population in the United States. Today there are less than half that number.

For many years this disease led all others as a cause of death. Today it is exceeded by heart disease and pneumonia, with cancer, kidney disease and apoplexy following it closely.

What has caused these changes?

The biologists state that the tuberculosis death rate had begun to decline before there was any organized campaign against it, and that this reduced mortality is due simply to acquired and inherited immunity. The crusaders would like us to believe that the pleasing result is due solely to their efforts.

In *The American Mercury* for December, 1924, James A. Tobey discusses this subject in an enlightening manner, and concludes that both are partly right, and both partly wrong. Biological factors of immunity doubtless have caused a decrease in tuberculosis mortality, but the active propaganda of prevention and sanitarium treatment, carried out by the National Tuberculosis Association and other instrumentalities has, beyond question, greatly accelerated this decrease.

How is one to explain, in terms of natural selection, why the tuberculosis mortality is higher in the city than in the country; in Delaware than it is in Nebraska; in males than in females; in miners than in farmers?

Dr. Louis I. Dublin believes that the death rate for this disease will be reduced to 50 per 100,000 by 1930, but this consummation will not be achieved if we relax the vigor and sincerity of our campaign of education against the "Great White Plague."

Half the failure in life come from pulling one's horse when he is leaping.—Thomas Hood.

WHITE RATS AND THE CENSUS

If you want to make some money betting on what the population of the United States, or any particular state or city, will be at the end of the next ten or twenty years, get the November number of *The American Mercury* and read the article on "The Biology of Population Growth," by Raymond Pearl; look up some statistics and make the mathematical calculations.

You will remember that, a good many years ago, an old fellow, named Malthus, made some pertinent remarks anent the world's population which are much used by the "viewers-with-alarm," even to this day.

The more carefully we study what is going on around us, the more surely do we realize that the laws of nature are perfectly able to take care of themselves without any interference on our part. In fact, we are wholly unable to affect them in any way, and, whether we like them or not, the only course of wisdom is to get in line with them, for otherwise we will be run over, with disastrous results.

Growth is well known to be a biological process, regulated directly by natural laws, but it may seem surprising, at first sight, to realize that the growth of a city is subject to the same biological laws that control the growth of a white rat. Perhaps this may not appear so strange if we stop to consider that a city or a state is an aggregation of living beings, bearing much the same relation to each other as the

various living cells in the body of the white rat.

A series of very interesting graphs is used to illustrate the article above mentioned. In the first of these the age of the rat, in days, forms the ordinates, and its weight, in Grams, the abscissæ. In other graphs the dates of the censuses for various countries are used as ordinates, and the populations as abscissæ, and when the curves are produced they are found to be of exactly the same type as that for the growth of the white rat, showing that they all follow the same great biological law.

It lies within our power to do much to ameliorate the lives of individuals, and this we must always do, whenever possible; but it is something of a comfort to be able to snap our fingers at Malthus, and realize that the growth of population, in our city, our country and the world is a matter that is out of our hands, and is being looked after by the wise, unvarying and extremely competent operations of natural law.

We can not employ the mind to advantage when we are filled with excessive food and drink.—Cicero.

THE FRONT OFFICE—AND THE BACK

Very few physicians (or any other class of people, for that matter) realize at all fully what profound effects are produced upon human beings by the rooms in which they live and work. There are scientifically recorded cases of severe neurasthenia which have been caused by living in a room whose prevailing color scheme was red, and which have been completely relieved by the substitution of some less irritating color.

We have all been in rooms and houses where we felt a sense of vague, though sometimes acute, uneasiness or discomfort, and could not tell why.

Many people have the idea that, because a woman is nervous and more or less indefinitely ill all the time, it is a valid excuse for her to be careless about the keeping of her house and her person. We believe that dirty and untidy houses, Mother-Hubbard wrappers, and soiled boudoir caps to hide uncombed hair, are the *cause* of more general inefficiency than most people imagine.

The foregoing is the text for a brief discourse upon doctors' offices, the same being inspired by an article on certain phases of the subject by Cecil Stanhope, of Chicago, which appeared in *Medical Economics* for July, 1924.

Mr. Stanhope, who gives evidence of knowing his business, shows clearly what a vast asset, in the way of increased comfort and a cooperative frame of mind on the part of the patient, is supplied by a waiting-room which is planned and furnished in accordance with the fundamental laws of the art of interior decoration, and with the psychology of the patient always in mind. It is a good article, and every physician who maintains an office can read it with profit.

The front office isn't the whole story, either. We have been in waiting-rooms which were neat and reasonably cheerful, and then wandered back into consulting-rooms, and, especially drug-rooms, which looked like the breaking up of a hard winter—piles of dusty and unopened magazines; empty or half empty bottles on shelves and window ledges; broken boxes and packing material on the floor—you've all seen places of this kind, so why continue?

The point is this: no doctor can furnish a high grade of scientific professional service, over any considerable period of time, in an environment like that indicated just above. Even if his mental processes were active and clean-cut at first (about which there may be some doubt), they will soon deteriorate in the midst of slovenly and unkempt surroundings, and his patients, particularly the housewives of the better class, will not fail to judge him by his habitat.

There is an inner meaning to this question, too. A man may keep his manner and the "front" with which he meets his fellow men (which corresponds to the reception-room) in irreproachable condition, but, if the back office of his mind is filled with a litter of sensuality, ungoverned emotions, unjust judgments, or just plain trivialities, there is bound to ensue a deleterious influence upon his life and work which, in time, will come to be recognized by his patients and his fellow citizens.

Leading Articles

The Public Health Service of the United States

By HUGH S. CUMMING, M.D., Washington, D. C.
Surgeon-General, U. S. Public Health Service

IN THE year 1798, the Congress of the United States established what for more than three-quarters of a century was known as the Marine Hospital Service.

The object of this Service was to provide medical relief for sick and disabled merchant seamen.

Subsequently, from time to time, Congress imposed additional duties and larger functions upon the Marine Hospital Service and eventually changed its name to the United States Public Health Service.

The plan for the Government to provide care for sick or disabled merchant seamen was the result of needs peculiar to our country during its early development, and resulted in the establishment of the system for the relief of these men, from which has developed a chain of marine hospitals and relief stations, now furnishing medical care to all who help keep our flag on the seas, as well as to injured civilian employees of the Government, in which latter duty the Public Health Service also participates. Twenty-five marine hospitals, with an aggregate of 3,474 beds are operated at ports on the Atlantic, Pacific, the Great Lakes and the Mississippi River.

In addition to these marine hospitals, relief is furnished in a much larger number of contract hospitals and out-patient clinics.

In caring for sick seamen, the Public Health Service became deeply interested in epidemic diseases—especially yellow fever—introduced into this country by vessels from infected ports. Quarantine measures were long administered entirely by State and local authorities, although, in 1799, Congress had enacted a law that federal officers should cooperate in the enforcement of these measures. In 1878, Congress authorized the extension of the Public Health Service as the Federal Health Service, with broad powers to cooperate with State and local health authorities in the control of diseases, especially yellow fever. The Public Health Service now operates all the quarantine stations in the United States and its possessions.

The American quarantine system is unique in the maintenance of a double line of sanitary defense. The application of preventive measures at foreign ports affords our own ports a substantial protection. The second line of defense, our quarantine stations, is our chief reliance. The exclusion of yellow fever from the United States during the past 18 years, despite its almost continuous prevalence in Mexico and Central and South America, is a striking testimonial to the system.

The Public Health Service operates today approximately 100 quarantine stations. As a rule, these are equipped with facilities for the inspection, mechanical cleansing, and disinfection of vessels; with clinical laboratories; steam laundries; detention barracks; bathing facilities and water supply and sewerage systems.

Last year the Service inspected 18,877 vessels and 1,811,246 persons at the continental maritime stations. At foreign and insular stations, 9,741 vessels and 1,321,699 persons destined for our ports were inspected; 5,349 vessels were fumigated or disinfected at domestic ports and 2,549 at foreign and insular stations. At the border stations, 75,236 travelers were inspected, exclusive of local interurban traffic.

In 1890, Congress made the Public Health Service the Federal healthy agency for the prevention of the interstate spread of cholera, yellow fever, smallpox, and bubonic plague, and in 1893 added the function of cooperation with State and local agencies in combatting all infections and contagious diseases.

When bubonic plague was threatened in San Francisco in 1900, in New Orleans in

1914 and later in three other Gulf ports, the Service, upon invitation of the State and local authorities, assumed charge of the control work in each instance and succeeded in suppressing these outbreaks. The like control by the Service of a serious outbreak of the disease in San Juan, P. I., is even more noteworthy because of the local conditions encountered.

In 1889, Congress authorized the organization of the commissioned corps of the Public Health Service, with the Surgeon General at its head, the officers to be commissioned in grades as in the medical department of the Army and Navy. Thus was created a mobile sanitary corps available anywhere for the control of epidemics, for quarantine duty and for investigative studies.

With the tide of immigration which began about 1880, a system of medical inspection of arriving aliens became imperative. For a time such inspection was made by the several States; but the problem was recognized as a Federal one by acts passed in 1891 and 1893, authorizing officers of the Public Health Service to make such inspection. At this day all entering aliens are subject to examination by officers of the Service, and the presence of certain diseases and conditions necessitates mandatory exclusion. Last year 745,515 immigrants and 826,295 alien seamen were examined by officers of the Service.

In consequence of the rapid development of public health measures throughout the world in the past half century, international sanitation has also advanced, as evidenced by the ratification by the United States of the International Sanitary Convention of Paris, held December 3, 1903; the organization of the International Bureau of Public Health of Paris; and the establishment of the International (now the Pan-American) Sanitary Bureau of American Republics in 1901.

From the control of epidemics the Public Health Service began to develop control measures for the more common contagious and infectious diseases, like typhoid fever, diphtheria and measles. The remarkable control of typhoid fever accomplished in the United States within the past fifteen or twenty years belongs to the history of the Public Health Service in cooperation with State and local health agencies. Today typhoid fever, which formerly took an annual toll of more than 30,000 lives in the United States, is responsible for about 8,000 deaths a year. This rate should be lowered still further.

The research activities of the Service began in its early years with the investigation of yellow fever and cholera. The establishment by Congress of the Hygienic Laboratory in 1901 signified that systematic scientific research of the Public Health Service in the field of preventive medicine and hygiene was at that time placed upon a firm basis. The Hygienic Laboratory has grown steadily and now stands as one of the foremost research institutions of the world.

Research studies under prosecution by the Public Health Service include investigations in child hygiene; industrial hygiene; stream pollution; epidemiology, and vital statistics; malaria; sewage disposal; cancer; clonorchiasis; diphtheria; dengue fever; leprosy; Rocky-Mountain spotted fever; food poisoning; mental hygiene; milk protection; public health administration; nutritional diseases; tularemia; pneumonia and drug addiction.

The research workers of the Public Health Service have contributed to modern hygiene and medicine material aid in observations bearing on the method of transmission of yellow fever, demonstrated finally by Reed and Carroll of the Army; the proof that pellagra is a disease of improper diet and is preventable and curable by a well-balanced diet; the identification of the American species of hookworm as the cause of a widespread anemia; a treatment for leprosy promising much improvement over previous methods; the discovery of the cause of tularemia or deer-fly fever; and the development of a process for the manufacture of sulpharsphenamine, a drug as important if not superior to salvarsan and neosalvarsan.

The law requires the Service to supervise and control the manufacture of viruses, vaccines, therapeutic serums, toxins, antitoxins, and analogous products applicable to the prevention and cure of the diseases of man. The manufacture of some 104 different biologic products is accordingly supervised by the Service, the products being constantly tested for purity and potency.

To prevent interstate spread of disease and to suppress epidemics, the Service is authorized to cooperate with State and local health authorities. Work here includes annual conferences with the State health officers, and other conferences as required; the institution of measures to eradicate

bubonic plague and for mosquito control; sanitation of interstate carriers, and control of travel of diseased persons; promotion of effective State and Federal control over the spread of communicable diseases; activities for the eradication of trachoma; demonstrations in rural sanitation; assistance in establishing and improving divisions of communicable diseases and sanitary engineering, and assistance to the National Park Service of the Interior Department in sanitation of the National parks; investigation of unhygienic conditions and outbreaks of communicable diseases; and, as special types of cooperative work, combatting social diseases, the promotion of rural sanitation and the prevention and control of malaria.

An important function of the Service is the dissemination of general public health information. Scientific information is promulgated by bulletins prepared by the Hygienic Laboratory and the Division of Scientific Research. State and local health authorities are advised as to the prevalence of diseases by the weekly publication of the Public Health Reports, in which appear, also, articles of general interest to sanitarians. State and municipal laws and regulations and judicial decisions relating to public health are compiled and published. The broadcasting of information by radio has been practiced by the Service for about two years.

The present legalized functions of the Public Health Service may be summarized as follows:

1. The protection of the United States from the introduction of disease from without.
2. The medical examination and inspection of all arriving aliens.
3. The prevention of interstate spread of disease and the suppression of epidemics.
4. Cooperation with State and local health departments in public health matters.
5. Investigation of the diseases of man.
6. The supervision and control of biologic products.
7. Public health education and dissemination of health information.
8. The maintenance of marine hospitals and relief stations for the care and treatment of certain beneficiaries, as prescribed by law.

The Public Health Service has broad basic authority relating to Federal matters. The present need, therefore, is adequate facilities for the exercise of this authority.

The Relationship of Asthma to Hayfever

By BURTON HASELTINE, M.D., Chicago, Illinois

NO THEORY or conception as to the nature of bronchial asthma can have much validity if it does not include a fairly clear explanation of the relationship between asthma and the other socalled allergic phenomena—hayfever, hyperesthetic rhinitis, urticaria, etc. No satisfactory explanation is revealed by a study of the literature and great confusion appears to exist in the minds of pathologists as to the interrelationship of these various clinical phenomena. That there is more than a coincidental relationship seems indisputable. That they frequently coexist and that they occur in various combinations is well known. That there is a fairly constant sequential relationship is vaguely noted, but this has not been considered significant and apparently no complete explanation for it has been attempted.

There is need for clearer definition, both in our ideas and in our nomenclature dealing with these subjects. Each writer, if he would escape misquotation, is obliged to define specifically what he means by such terms as asthma, allergy, sensitization, hyperesthetic rhinitis, seasonal asthma, and so forth.

In a previous paper ("Bronchial Asthma," CLINICAL MEDICINE, August, 1924) was presented a hypothesis attempting, in some measure, to explain the asthma syndrome. It will now be of interest to see whether the conception then presented in any way contributes to a better understanding of these associated phenomena and their obscure relationships. Reverting to our earlier statement, it wil be recalled that two conditions were postulated as essential to the production of bronchospasm, namely, an abnormal systemic condition known as a "toxic state," and an excessively irritable peripheral organ, in this case designated as the "ethmoid region."

The Toxic State

Let us now consider the first of these two essentials, the "toxic state." It is easily demonstrated to be present in all asthmatics, but it is also present in many patients who are not asthmatic and who show no tendency to become so. It results from an improper balance between absorption of toxic products and elimination of them. It is recognized by fairly well-known clinical signs and by laboratory study of blood, urine, etc. It should not be confused with the condition known as the allergic state, although closely associated with it. It, in fact, includes the condition called allergic, as all allergic patients are toxic, but many toxic patients do not present the phenomena of allergy. The allergy, indeed, appears to be only one of the symptoms of the toxemia and, like all other symptoms, tends to disappear with the application of suitable measures for detoxication. It is important to recognize that this toxic condition is the one basic factor underlying all these abnormal manifestations. With considerable definiteness, these toxic cases can be divided into two main groups, namely, the allergic and the nonallergic group. Clinically the distinction is usually clear, the allergic case showing some of the well-known clinical symptoms which are confirmed by sensitization tests. Observers agree that true allergy is found in only about fifty percent of cases suffering from bronchospasm. The other fifty percent are toxic cases of the nonallergic type.

Each group presents certain distinct characteristics with considerable constancy. The outstanding feature of the allergic case is an abnormal tissue sensitiveness to one or to many substances which are not offensive to the tissues of normal persons. Whether this hypersensitiveness is due to some quality in the tissues or in the blood or lymph streams is not known, but it seems to be present to some degree in all the body tissues. In any event, the manifestation is a local tissue reaction in the areas exposed to the offending substances, and the conduction paths of the nervous system are in no way involved.

In the toxic patient of the nonallergic type, the tissues do not show abnormal sensitization but the central nervous system, from exposure to toxins, shows abnormal irritability predisposing to spastic explosions. In all spastic conditions, some of the neural conduction paths are necessarily involved.

Now the manifestations known as hayfever and hyperesthetic rhinitis—seasonal or nonseasonal—are local tissue reactions of the allergic type and result only from contact with some of the substances to which that individual is sensitive. They are in no sense spastic phenomena and no nerve conduction paths are concerned in their production. The typical hayfever reaction may occur on any mucous membrane just as it occurs on the skin where the sensitive layers are exposed to the specific excitant, as in the socalled sensitization tests. The overwhelming predominance of the nasal symptoms is due to two entirely accidental factors: first, the offending material, being usually air-borne, reaches the respiratory tract in greatest abundance; second, the nasal tissues, because of their peculiar structure, react more violently to any irritation than do most other organs. The condition essential to the production of hayfever, then, is a bodily state not depending upon abnormality in any one organ. A patient in this condition exposed to suitable irritants may have an attack of hayfever *with a previously entirely normal nose.*

Bronchospasm is not a local tissue reaction but is an exaggeration of a normal physiological reflex involving certain conduction paths of the central nervous system. The two essentials for its production are: (1) undue excitability of the central nervous system due to a toxic state, and (2) an abnormal irritability of certain nasal structures. This toxic state producing bronchospasm is, in at least half the cases, of the nonallergic type. The toxic patient of whatever type may show all other evidences of toxicity; he may even exhibit marked nervous irritability but, without the nasal factor, he will not have bronchospasm. Obviously, then, he cannot have bronchospasm *with a previously entirely normal nose.*

We have here, then, the explanation for the peculiar sequential relationship between hayfever and asthma so commonly observed and so little understood. Everyone knows that the chronic hayfever patient later becomes asthmatic almost without exception, usually passing through a period of "hay-asthma" and ending as a chronic asthmatic with perhaps seasonal aggravations. With about equal frequency are found asthmatics without a preceding hayfever, while the patient who first shows hayfever after long periods of bronchospasm is rare indeed.

A patient may have bronchospasm all his life without developing the tissue sensitiza-

tion necessary to produce hayfever. But, a patient cannot have repeated attacks of hayfever without developing the nasal pathology necessary to produce asthma. The basic toxicity he already has. He only needs the increasing nasal damage, inflicted by these repeated ordeals, to provide the other factor and, as this goes on, he passes through the hay-asthma stage into that of the fully developed asthma type.

Revised Nomenclature Needed

It is unfortunate that we have not at present a nomenclature enabling us to define clearly the various distinctions that are recognized as important. It is paradoxical that a condition primarily extra-nasal should have names suggesting the nose (hayfever, hyperesthetic rhinitis) while one with an essential nasal factor is called *bronchial* asthma. Even the word bronchospasm conveys a too limited idea of the actual phenomenon. While the attack, in its incipiency, is a bronchiolar spasm and in mild cases may be no more, it should be recognized that this spastic storm runs true to type and rarely limits itself to a single muscle group. Just as in epileptic seizures the spasm may begin in certain muscles and rapidly extend to associated groups, so this bronchospasm tends to involve other respiratory muscles and we later have thoracic spasm, diaphragmatic spasm and perhaps cardiospasm as part of the distressing picture.

All these phases are of the highest importance and must be considered in making our estimate as to the curability of any given case. We have also now explained why sensitization tests as commonly employed are of considerable value in estimating a patient's susceptibility to hayfever, of some value in hyperesthetic rhinitis and of little or no value in estimating his susceptibility to bronchospasm.

It becomes apparent also how and why we are able, in bronchial asthma more often than in hayfever, to predict results and to proceed with more precision to obtain them. In toxic patients of the nonallergic group, we are more apt to find definite and removable causes for the toxicity. In the allergic patient we are often dealing with toxins of the endogenous type due to disturbance not easy to discover nor to correct. Likewise, we have no local condition to which we can apply measures either of relief or cure, whereas, in bronchospasm, we have in the nasal pathology at least one factor that is, as the lawyers say, "actionable."

By no means does this imply that all nasal pathology is removable. Few problems are more difficult for the rhinologist than those presented by the head conditions in old asthmatics; but, in so far as the nasal conditions are correctable, the bronchospasm is likely to be relieved. So important does this point become in practice that a favorable prognosis depends more upon the amount of nasal pathology and the possibility of its correcting it than upon any other single factor.

When we speak of more definite results in bronchospasm, it should not be inferred that we are helpless in the presence of hayfever. All clinicians who have employed these methods extensively have reported better results than were previously obtained from vaccines, serums and antigens. But, clinical reports in hayfever cases are, for obvious reasons, of little value until considerable numbers of patients have reported their condition during several consecutive seasons. In one respect, at least, a distinct gain appears to have been made: We can with considerable accuracy select those cases in which marked improvement can be promised, thereby avoiding much experimentation and disappointment.

Selection of Cases for Treatment

This selection is based on two main factors: The amount of correctable general toxicity, and the amount of nasal pathology, if any, existing between attacks. With these two factors prominent, we can with confidence predict a marked and often complete relief. In referring to the toxic state underlying all these manifestations, we have said it is recognized by clinical signs and by the study of blood and urine. The blood picture does not differ from that of other chronic infections except in the eosinophilia which is present in the majority of cases. Apparently the eosinophilia is found more often in patients of the allergic type, but its presence appears to convey no information of clinical value. It tends to disappear with detoxication and thus may be helpful in checking up the effect of treatment.

Of far more importance is the relative blood alkalinity; but, clinically, this is less helpful than the observation of the degree of urine acidity. It would be difficult to overstate the importance of expert interpretation of urinary findings in dealing with these toxic cases. No one can speak

on this subject with greater authority than Dr. Clifford Mitchell, of Chicago, and we can do no better than to quote his opinions. It is interesting to note that, long before the toxic basis of asthma was thought of, Dr. Mitchell had observed that his most extreme cases of indicanuria were in patients suffering from bronchospasm. In a personal communication, Dr. Mitchell has kindly noted some of his observations in this connection, which are as follows:

"It is my opinion that a number of conditions called disease entities are merely the end results of a toxic state affecting individuals differently. If one will test for indican the carefully-collected urine of six thousand persons, he may find that five thousand will not respond to the test in a marked degree. Indican is a normal constituent of urine, but indican in conspicuously large amount in proportion to other normal constituents is, I believe, an almost infallible sign of a toxic state. It does not mean that the individual is sick in the ordinary sense, but that he is carrying a toxic load and that, under certain conditions, he may stagger and fall when others, less toxic, could 'carry on' successfully.

"It is likely that persons who are in this toxic state fall below one hundred percent efficiency in the work of their detoxicating organs; that the thyroid and parathyroids become more or less weakened in function; and that the liver and pancreas fail to attend efficiently to their glycogenic functions. Hence, we may find, on the one hand, calcium deficiency in the blood of such persons and, on the other, traces of sugar in their urine. The digestive organs and kidneys, also lacking efficiency, may fail to neutralize the various toxic acids and hence we may find higher acidity in the urine, especially if we use modern methods for determination of acidity as, for example, with methyl red or bromcresol purple.

"To treat such persons for either calcium deficiency, diabetes, or 'acidosis' appears to me to be hardly logical, since we are then merely treating the effect without removing the cause. It is true that, by examination of the urine for acidity, sugar and indican, we can in some cases predict the recrudescence of certain unpleasant symptoms of the overload of toxicity, and hence be able to minimize the severity of an attack; but, to effect a radical cure, the cause of the toxic state must sooner or later be removed.

"Indol and skatol are, to be sure, not the only substances concerned in the production of toxic states: guanidine, for example, is now receiving attention as one of the things concerned in piling up the toxic load. There may be also other, and thus far undiscovered, poisons formed in the intestinal tract, which are responsible for the toxic state, but the finding of indican in the urine is clinically within the reach of everyone of us, as is also the determination of the degree of acidity and the detection of small amounts of sugar; hence, in every case, where these findings are marked and unmistakable, the diagnosis of a toxic state may safely be made and steps taken to remove its cause."

It is interesting to note how Dr. Mitchell's conclusions, the result of scientific study, fit into our conception based on clinical observation, and how both serve to explain why it is more logical and more successful to attack the basic cause than to treat isolated results by empirical methods.

The asthma and hayfever problem is neither simple nor easy but it certainly is more successfully attacked along these lines than in any other manner. Not only is the clinician rewarded by a high average of results but even with only partial successes he is immensely heartened by two important considerations: (1) Every measure employed, apart from its effect on the specific ailment, is entirely beneficial to the patient and helps toward his recovery of normal health. This contrasts strongly with attempts to cure by surgical attacks upon the nervous system, now being advocated. All such measures, whether destruction of conduction paths or removal of deep ganglia, even if the presenting symptom is controlled, will leave the patient to some extent permanently damaged. (2) The patient escapes entirely the danger incurred in every attempt to desensitize by serums, antigens, etc. This danger is no imaginary thing. During the preparation of this paper, I have received from the chief of one of our largest asthma clinics the report of a death from an attempt upon his part to desensitize an asthma patient with ragweed antigen. Reports of one other fatality and three alarming reactions without death have come from other sources during the same interval. In each case the experience, skill and carefulness of the operator were beyond question. It strikingly shows the need for further reiteration of our much repeated statement: "The asthmatic patient is carrying a toxic load already straining his capacity; the deliberate addition of more toxic substances to that load is illogical, unscientific and dangerous."

122 South Michigan Avenue.

Evidences of Pathology and Postural Defect from Feet and Shoes

By CHARLES CROSS, M. D., San Francisco

IN THE pendulum swing of changes taking place in medical practice, it is pleasing to note the interest that has been awakened in the feet, foot ailments, and postural defects, and the treatment of those conditions in the offices of our colleagues.

Now that feet and foot pathology have been classified (1), and nonsurgical Orthopedic Service is a perfected specialty, a long neglected and wide field of practice, between that of the operating orthopedic surgeon and the chiropodist, can be successfully covered in the offices of the family physician or the general physician and surgeon.

Indeed, the importance of understanding and applying early treatment to foot ailments and postural defects cannot be too greatly emphasized. If there is any reason other than ignorance of the subject, why members of the medical profession should continue to neglect this field of practice to the advantage of irregulars, incompetents, and the uneducated, I have never been able to discover it.

For neglect of these allied ailments physicians should not be too seriously blamed, because this subject is not taught in any medical college in the world; in fact, it is postgraduate instruction and not for colleges. Neither is it for hospitals, nor for clinic experimentation.

An Office Specialty

Modern, practical, and scientific examination, diagnosis and effective treatment of foot ailments and postural defects is professional work which I think belongs in the offices of medical graduates, and it is practice which any progressive member of the profession can add to his regular or general practice. From my experience I believe that this field of professional work will grow in every community where it is established because it is a service which the public is learning to demand. The treatment and prophylactic service in this work, in a physician's office, is much like that of the orthodontic specialist for straightening teeth, in that it is slow, requires deliberation, and scientific observation and direction for the best results.

Many children who are not deformed have some degree of postural defect, or beginning foot ailment with postural defect incident thereto. These conditions contribute to cause serious foot ailments that will require prolonged observation and occasional treatment, and if members of our profession are not qualified to cope with these conditions where shall we direct these sufferers for relief?

With a reasonable amount of home study, and review of subjects with which the doctor has long been familiar, and some observation and general reading, it is remarkable how readily practical information on this subject may be acquired, also how readily so much prevalent misinformation can be detected.

A good place to begin clinical experimentation and investigation is right at home. Look at your shoes. Look at your wife's shoes, then look at the children's shoes.

In the study of feet, and foot pathology, and posture, normal and defective, the shoes should not, however, be given undue consideration. It is to the feet our special attention is directed.

For beginners it might be interesting to make a few contour pedograms or outline tracings of any feet. Keep them around and look at them p. r. n. At this period of inspection-observation, it will be well to keep your own counsel. The soil of independent constructive thought is easily polluted, so just for the present don't talk about *merchandise* while we have under consideration *anatomy* and *pathology*. Let the shoe-store-man alone. His business is to sell merchandise, and we are not just now considering merchandise, microscopes nor test tubes.

If military preparedness means anything in our country the care of the feet is a subject of interest to everyone, and will require from the medical profession more scientific care in the future than in the past.

Now that office betterment service is gradually moving over the country, our colleagues are becoming executives as well as physicians. Many progressive members of the profession appreciate and apply modern methods of physiotherapy, electrotherapy

[1] Am. Journ. of Surg., N. Y. Mar., 1920.

and other effective measures of nonsurgical treatment and have those departments in the hands of trained aides and technical assistants. To any of them a foot orthopedic service can be added, to the mutual benefit of those who serve and those who are served.

Fig. 1. Beginning foot pathology with insidious postural defect. The left foot is right and the right foot is wrong. Children with beginning pathology like this are to be seen on the streets by the thousands.

Necessity for Foot Treatment

As for practical results from this branch of practice, even in the small town, it is all that could be desired. The following is quoted from a letter written by a physician living in a small community. He first learned about foot ailments, and diagnosis and treatment in the Army service:

"During the past two years I have treated more than two hundred patients with foot pathology, most of whom have been satisfied. I now have an office in ——— where I spend two days a week on foot and postural defect orthopedic practice exclusively and with a growing clientele . . ."

The great need for this service can be seen on the street every day. Studying sight-diagnosis of the feet you meet on the street is intensely interesting. With the physician's trained eye it is soon easy to realize that *shoe-wrecking* feet can give accurate evidence of pathology which may cause symptoms extending as far upward as the neck.

Rendering this needed professional service takes nothing from any other branch of practice. It supplies a service which is needed in every community, and, giving comfort and increased efficiency to individuals, it also adds to community and national wealth.

The illustrations with this paper almost tell their own story. They are pictures of foot pathology which can be seen in the office of almost every physician.

Too often such patients are neglected or mistreated. Or, worse yet, not treated at all; or, still worse, they are too often referred by members of our own profession to irregulars, incompetents or the uneducated, whose useless therapeutic merchandise is worse than mistreatment.

The illustration submitted by Caroline Cook Coffin, M.D., of Berkeley, Calif. (Fig. 3), shows a pair of feet that went through such an experience. With anterior metatarsal arch pathology, adhesions, callouses, and painful papilloma, which caused terrible suffering and almost complete disability, this patient trailed about for three years. She was directed by her doctor to a chiropodist, then to a plate-maker, and then to a shoe-store, and continued getting progressively worse. Fig. 3 shows the visible pathology when treatment was begun by Dr. Coffin.

Fig. 2. Feet of wage earner, totally disabled. After course of office treatment, and removal of infections he returned to usual work 100 percent efficient. Now, two years later, and under occasional treatment, efficiency normal, and no distress.

The palpable evidence of pathology cannot be illustrated but there was plenty of it.

The symptoms had never been considered worthy of attention. After a careful examination and correct diagnosis, and under appropriate office treatment, Dr. Coffin broke up the adhesions, which bound the feet in permanent distorted position. Following this, and for temporary use, the patient was supplied with mechanical sup-

ports. These supports were constructed in the office, and the necessary changes were made as indicated. As a result of this treatment the case went on to recovery and the lady is now a very grateful patient.

Peggy T. (Fig. 1) now walks normally, but is under prophylactic observation and occasional treatment. Another case (Fig. 2) was successfully treated by J. H. Robnett, M.D., of Albany, Ore., with the result that the patient is now back to normal and well satisfied with the treatment.

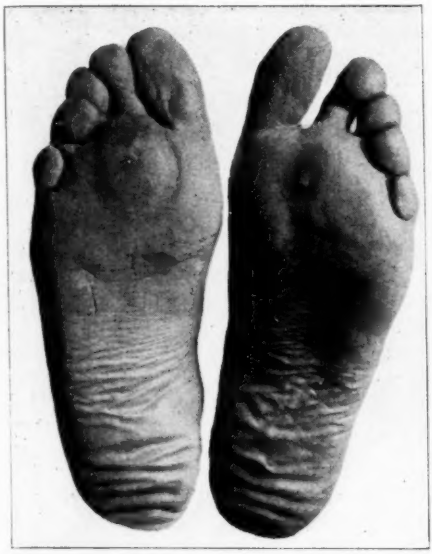


Fig. 3. Under cover blemishes. Not for the world to see. After three years mistreatment, and maltreatment, total disability and not for operating orthopedic surgeons nor for chiropodists. Recovery after six months treatment and now under prophylactic observation and an occasional treatment.

This paper was suggested by an article recently read, which stated:

"The proper way to correct a weak foot is to align the misplaced bones, and *wedge the shoes on their inner border.*"

To the thoughtless, and to the ignorant, this glib advice may sound plausible, but from my personal experience it is heartless and cruel. It is cruel because children cannot help themselves and are compelled to bear the torture.

With such crudeness, and the wedge too high or too low, which will suffer most; the soft bones of the foot or the hard shoe; and what shapes will the bone facets assume? Whatever your opinion of this treatment is, don't try it on your own child, and don't permit any one else to try it on your child. It is bad enough to have ailing and distorted feet, but it is humiliating to carry the banner of one's deformity in the form of freak and clumsy shoes, and disfigured footwear.

If, in the modern and practical treatment of ailing feet, an elevation is required (and I make that IF very strong), with a few sheets of thick paper, some unbleached domestic, a sheet of gutta percha tissue, or a bottle of glue, and a pair of scissors—using an outline of the foot for a pattern—all the materials for elevation that will be required in the treatment of distorted feet in children can be assembled right in the office. With a small workshop annexed to the office, it will be surprising how many feet can be cared for in general practice, and what wonderful results can be obtained by persistent treatment.

Cooperating with J. H. Robnett, M.D., of Albany and Eugene, Oregon, and other colleagues in various localities, a system of archcraft support construction has been perfected and will be the basis of another paper. At present the aim is to direct the attention of the profession to the enormous number of children who need some scientific care given to their feet.

Correcting misaligned bones of a foot, to be successful, must proceed along the same deliberate lines which orthodontic surgeons follow to straighten teeth. To correct distorted and weak feet may require treatment over a long period, because the feet are often in service when the teeth are at rest. Office treatment of these conditions is not only scientific but it is effective and successful to a degree never before thought possible. Before, however, beginning to treat the feet, let us see if they have the slightest chance to get out of the "weak foot" class by normal development. Let us measure the length of the foot, and then compare that measurement with the shoe.

The illustrations with this paper are from pathetic causes. Figure 4 shows an exaggerated "shoe-wrecking foot." From the history it appears this condition is largely due to neglect. The patient was formerly an officer in a foreign army. He now resides in the United States and, about two years ago, he presented himself at a hospital for treatment, complaining of swelling in his feet. He stated that he was told swollen feet came from heart disease. His heart was examined, his feet were not looked at, and he was given a bottle of medicine "for the heart." About a month later, he called again at the hospital and practically the

Fig. 4. A shoe-wrecking foot.

same procedure was followed, except at this time the color of the "heart remedy" was changed. Following this he called several times and always complained of his feet. The feet were not examined so he took his own case in hand and, as a result of his treatment, he has about a trunkful of arch supports of all kinds, yet his feet continued to get worse. The photograph with double outline was taken when he came to our service for examination, and shows the extreme excursion of lost motion which this foot, ankle and leg must go through at every step. Figure 5 shows the condition of his shoe. Even with this condition he has kept steadily at work. Under proper nonsurgical treatment for about three years, the prognosis is favorable for a comfortable and serviceable foot, if he will give it the proper treatment.

Figure 6 is an illustration of the shoe of a patient for which a built-up sole was ordered. The mother states that the child's feet were not looked at. The buck was passed to the shoemaker, the doctor's ignorance of feet was camouflaged, and the child could have gone on and been crippled, or disabled for life. The rod (Fig. 6) shows

Fig. 5. Mutilated by a shoe-wrecking foot.

that his feet did not have a chance to develop. Longer shoes, some careful muscle-group massage, with occasional inspection for the next few years and his feet will develop as they should. During the period this child is under observation his feet will be examined at regular intervals and before every pair of shoes is selected the feet will be measured. "The length of the longer foot, plus the width of the thumb" will be

Fig. 6. Foot-wrecking shoe.
B. Length of foot.
A. Length shoe should be.

the length of the rod which his mother will use to check the measurement of his shoes when they are purchased. Then the shoes, before they are worn, will be brought to this office and vised. The shoes will be checked and compared with specifications and a few years later, when needed, he can be checked as "recruit one, passed for service U. S. A."

At a later day I hope to submit for publication a paper on the modern and effective treatment and management of the condition referred to as "weak foot," and

the early diagnosis of that condition. These subjects are considered from the standpoint of the general physician and surgeon and can be as well treated in the country office as in any city office.

As mentioned above, the successful treatment of this class of ailments is necessarily slow, but the results are well worth all the time it takes.

4263 California Street.

Relation of Nasal Conditions to Eye Diseases

By J. IVIMEY DOWLING, M.D., Albany, New York

AT A DINNER given by Dr. Ely at his beautiful Southampton home, I had the pleasure of a conversation with Holbrook Curtis, whose reputation over a period of years was second to none. After relating to me some of his experiences with well-known operatic stars, our talk reverted to advances made in our special fields of medicine. I remarked to him that I considered the most helpful thing that he had ever done, and possibly even the greatest, was his translation of Friedrich on "Rhinology, Laryngology, and Otology in General Medicine," and I then added that Chapter Ten had been quite an inspiration to me in the study of the relation of the nose to diseases of the eye. He looked at me curiously and said, "Friedrich? Friedrich?" "Yes," I said, "you were the translator, and the book is a very valuable addition to any medical library."

He was thoughtful for a moment and then his face lighted up and he said: "Oh, yes, I remember, I did translate such a book, but you are the first man, in all the years since 1900, when it was published, who has ever told me that he had read the book." Even so, I am sure that Friedrich's ideas and Curtis' translation have had a great influence. Bosworth's edition of 1889 also mentions a case of glaucoma apparently benefited after the removal of a nasal polypus. Grünwald discussed the matter very thoroughly and called the oculist to task because he had not made use of the rhinologist more often.

Many others have made casual reports up to within very recent years when more concentrated effort has been made to study the relation of the nose to the eyes. Some of our well-known oculists have refused, until very recently, to credit the value of the many reports made, but now the matter has resolved itself practically into one of focal infection, and after comprehensive study it is recognized that focal infection may be responsible for a variety of symptoms in a nearby organ or in far distant parts. Therefore, some believe that many of the obscure conditions of the eye may be rightfully considered secondary to some focal infection within the nasal accessory sinuses.

To secure the best results in treatment of these obscure eye conditions, it is necessary to know what should be done to the nose or sinuses in the event that they are found to be in an abnormal state.

The matter is simplified by disregarding the various classifications of inflammatory conditions existing within the nose and simply considering that they are all caused by an interference with the drainage and ventilation of the accessory nasal sinuses, plus some variety of pathogenic infection. The sequent hypertrophic sinusitis and closed empyemas necessitate treatment or surgery to reestablish ventilation and drainage of the several groups of accessory nasal sinuses.

Methods of Treatment

The methods for relief when these conditions are present may be termed simple and radical, but the end to be gained in every method is to provide free drainage and ventilation of all accessory nasal sinuses. Failure to obtain this result is often sufficient explanation for the varied accomplishments of somewhat similar surgical procedures. The less radical measures that may be instituted are such as will shrink erectile tissues permanently and thereby accomplish the same ends as are sought through surgery.

Many years of experience leads me to make the somewhat dogmatic statement that no treatment has proven equally successful to that known as the "Dowling Method," and which I first reported some twenty odd years ago. The findings that have been stated in previous papers have been corroborated so many times that a paper by me would be incomplete without reference to this method of treatment. Therefore, I will

insert here a short description of the method by Dr. Crawford R. Green, of Troy, N. Y., who published, in the *New England Medical Gazette*, for August, 1916, a paper entitled "The Dowling Method of Nasal Tamponade in General Practice."

The doctor's introduction and description of the method states: "The reports of researches in the domain of the specialties very often present to the general practitioner, absorbed in the daily routine of clinical medicine, a mystic maze in which he takes scant interest and of which he has but little comprehension. This is particularly true of achievements in the specialties of eye, ear, nose, and throat. The general practitioner appreciates, in a general way, the value of all such discoveries, but he realizes that their application is largely confined to his highly trained colleagues who are practicing as specialists. Nevertheless, if he keeps in touch with the progress of these specialties he is occasionally rewarded by unearthing a nugget of pure gold—some method of procedure capable of accomplishing much in such a simple manner that it is at once ready for use by every physician of ordinary intelligence.

The Dowling Method

"Such a procedure is the Dowling method of nasal tamponade. This was evolved by its originator, Dr. J. Ivimey Dowling, of Albany, after a long study of the intimate relationships existing between conditions of the accessory nasal sinuses and conditions of the optic nerves, retinal and choroidal diseases, affections involving the iris, conjunctival and corneal diseases, muscular errors, and conditions of erratic refraction in which glasses are frequently changed without benefit. In all this wide range of conditions, drainage of the accessory nasal sinuses has been shown to result in marked improvement, often so striking as to seem to the uninitiated but little short of miraculous. Dowling's original experiments were directed toward discovering some simple method for securing the drainage of the sinuses. After unfavorable experiment with many other agents, this result was finally accomplished by the employment of nasal tampons of argyrol, *forty grains to the ounce*.

"From the original purpose of relieving ocular conditions, experience has elaborated for this method of treatment a much wider field of utility, for it has been found to give striking benefit to many acute and chronic affections of the nose and sinuses, acute and chronic inflammations of the eustachian tubes, middle ears, and even the pharynx and the larynx.

Method of Application

"The tampons, which are inserted into the nares under full illumination with the head mirror through an ordinary wire nasal speculum, are made from long fibre cotton (the ordinary sterilized absorbent cotton) wound around a long, smooth, wire applicator. The amount of cotton necessary to make the tampon should be flattened and stretched to the desired length and thickness and then wound around the applicator and saturated with the argyrol solution. It is always advisable to inspect the nose before introducing the tampon, in order to determine the width of the nares and the presence of any irregularities, for the tampon should be sufficiently long to fill the middle meatus without undue discomfort. The tampons should always be placed in both nostrils. They are left in position for from ten minutes to one hour. They are then removed by gently withdrawing them with an ordinary tissue forceps, and the nares are thoroughly cleaned with a nasal douche. Before the treatment is begun, the patient should be supplied with several squares of gauze, for there will be considerable dripping of argyrol from the anterior nares and the patient is likely to sneeze frequently during the treatment."

Relations Between Nose and Eye

As to the type of case that may be relieved through treatment of the nose or application of surgery, it is well to bear in mind that the anterior group of sinuses are more prone to affect the anterior segments of the eyeball. The posterior ethmoid cells and sphenoid cavities are more apt to affect the deeper uveal structures and optic nerve. This includes that much discussed disease, glaucoma.

In this instance, however, it seems to be clinically evident that the glaucomatous symptoms result because of the colloidal changes which take place in the ocular media, and, therefore, interfere with the drainage system of the eye.

That this is no theory of recent date is evident because Knies reported in 1890 his theory of positive infection. My own idea merely states as a corollary to his thought that "The method by which this ensues may result from streptococcic, staphylococcic or other infection of the ethmoid cells or nasal accessory sinuses, which having become infected act as natural laboratories in which

the germs multiply and develop toxins which may be conveyed by way of vascular or lymphatic channels to the uveal tract." These statements remain to be proven scientifically, but one who pursues the idea in a clinical way in the treatment of glaucoma will be more than satisfied because of the added benefit and long sustained relief from symptoms.

Furthermore, in my practice I have patients successfully operated according to the Elliott operation as long ago as ten years. Filtration blebs appear every time there is an increase of tension. This often happens in the presence of some acute or subacute infection within the sinuses. Treatment of these patients by the "Dowling method" at such times reduces the tension from five to ten points. At this present time, it would be unwise to say that glaucoma could be treated without operation or without myotics, but it is my own personal opinion that the man who treats glaucoma without giving the patient the benefit of complimentary treatment of the sinuses has failed to a very essential degree.

All oculists are interested in diseases of the optic nerve and it is even stated by some authorities that 90 percent of optic-nerve diseases may be considered luetic. My own successes, partial successes, and some failures, lead me to dispute this statement and to emphasize as a fact that in many cases of optic-nerve disease or of diseases of the optic chiasm there will be found some complicating diseases of the ethmoid or sphenoid cavities. The most serious involvement of the nerve tract frequently being exhibited in the condition that presents no evidence of focal infection other than hypertrophic or atrophic disease within the ethmoid cells or sphenoid cavities.

Results obtained in operating for lesions of the optic nerve vary somewhat. Cases that have fallen below 20/100 visual acuity and whose field for form is greatly limited, are poor operative risks.

Three results may follow intranasal operations for the relief of optic nerve lesions:

First, there may be a full restoration of vision so far as central visual acuity is concerned, thus permitting the pleasure of distant and near vision.

The second result is such as will stay the progress of the disease in the one eye while the other goes to total blindness. Onodi quotes Mendel as stating: "The main characteristic of an optic nerve neuritis, purely of accessory sinus origin, is that it is unilateral." This I have not found to be true, for careful tests of the visual fields will almost always reveal some involvement of the other eye. Therefore, it is my custom to consider optic neuritis evident in one eye as indicative that the other eye will sooner or later be involved, and, therefore, nasal surgery of a radical nature should be instituted at an early period of the disease.

The third outcome following sinus surgery for relief of optic nerve lesions is a slowing up of the process, but not a total arrest of the tendency to progressive loss of vision and eventual blindness. These results obtain with or without demonstrable lues, and so it seems to me that there is still much to be known relative to the cause of these serious nerve affections involving the sight organs.

As to the anterior parts of the eyeball, the lesions of the eye that seem to be more often associated with accessory sinus disease are iritis, corneal abscess, phlyctenular conjunctivitis, and ulcers of the cornea.

The well-known specific types of keratitis respond so satisfactorily to antispecific treatment that any complication within the nose or sinuses can be considered only factors and not the cause. The most astounding results for the relief of painful manifestations of the phlyctenular conjunctivitis and corneal ulcers is obtained by artificial ventilation of the maxillary sinus, this sinus being the one more often involved in lesions of this character. I have seen corneal abscesses and corneal ulcers that have withstood treatment over a period of days and weeks improve within twenty-four to forty-eight hours after opening the maxillary cavities.

In discussing this subject, it has not been my purpose to dwell upon alveolar abscesses as possible foci of infection nor to consider the possible effects of diseased tonsils, or the presence of adenoids obstructing the nose, nor have I referred to pituitary disease. These are topics for additional consideration.

In closing, I wish to reiterate that all obscure eye lesions, whether involving the intraocular parts or extraocular muscles, should be given the benefit of careful rhinological examination.

If drainage and ventilation of the sinuses are impaired, that should be corrected. If the presence of pus is demonstrated in one or many of the sinuses, that should be controlled through surgery and treatment.

Finally, if the infecting organism is

found to be pathogenic to the disease, then vaccine treatment should be instituted in addition to whatever other methods have been undertaken.

Intellectual Ankylosis
A Plea Against Empiricism in Thought

By W. V. GAGE, M.D., Worland, Wyoming

"WHEN you call a thing mysterious, all that it means is, that you don't understand it."—Lord Kelvin.

Probably no physiologist or pathologist in the world can turn in a report upon a pinch of epidermal tissue, taken from any portion of the body, and state *fully* as to its normal, day-after-day function, or describe the body chemistry, back of this function.

The commonest metabolic changes, in the tissues of the economy, whether they spell degeneration or repair, growth or age, are, in many instances, beyond lucid explanation as, for instance, the greying of the hair over the temples; the hypertrophy of the palm under continued labor, or the serum-filled bleb of the palm, due to unaccustomed labor.

A Few Questions

Who knows what water is, chemically?

Who can say, exactly, what a salt solution is?

Why should the skin of the palm hypertrophy, under continued, intermittent pressure while, at the same time, a soft, pulsating aortic aneurism gradually produces atrophy of the bony rib, with which it is in contact?

Who can explain why the red line of the lip, almost invariably stops, so as to leave a beautifully symmetrical border?

Why are the palms and soles hair-free; and what limits hair growth, i. e., determines the line limit, of beard and eyebrow; and why should certain diseased states render hairless areas normally covered?

This article is written with the idea of pleading against "Empiricism in Thought," and against the pernicious habit, among writers, of lifting bodily, month after month, and year after year, sentence and paragraph and page, from books previously written, and allowing these quotations to become part and parcel of an original article, and thus continuing, indefinitely, statements relative to unproved but accepted empiricism.

The author of this paper believes that an answer to any of the questions asked above would open vast fields, as to physiological and pathological fact, but it seems that the chief cause which prevents such investigation is, that the items named are so common and well known (?) as to render their study ridiculous.

During the last twenty-five years, I have given much thought to the following widely-separated topics and, while I believe that I have been able to see a little light regarding a number of the questions discussed, I am asking for further help.

Tonsils

First, as to the hypertrophied tonsil.

I believe that it is contrary to the original scheme of things for us to consider that the tonsil was placed where it is for no other utility than being removed—for a price.

Hypertrophied tonsils, turbinates and adenoids, mean nothing more than previous faulty body chemistry back of the overgrowth and, inasmuch as fuel or food intake is the outstanding item which influences, modifies and controls body chemistry and tissue metabolism, why should we not endeavor to so adjust the fuel intake that we may prevent this abnormal hypertrophy, or correct it when present?

In a child, except in pus-tonsils, a thirty-day training, which you *know* has been adhered to, will, in the great majority of cases, return to you a tonsil closely approaching normal. The thirty-day régime being: no over-eating, and an absence or minimum of the carbohydrates.

If one single element can outclass all others in the matter of rendering the tissues of the economy good culture soils for pathogenic bacteria, over-eating is that element and, in spite of the fact that we all realize, subconsciously, that this is so, the thing which renders the fact so difficult to be "driven home" is the proposition that almost every physician is, himself, an over-eater and, in consequence, incapable of realizing what over-eating really is.

When Moses commanded the Children of Israel to "fast" one day in seven, he probably did so fully realizing that it would

be of no avail, as a health measure, to suggest "light diet," day after day, and so, as a compromise, tried to establish, as a religious rite, a "fast" one day in seven, and the probabilities are that, if we all now actually lived up to this old Jewish mandate, we could add years and years to our span of life, by simply making a penance take the place of logical daily food evaluation.

Over-eating, and especially of the carbohydrates, is the one great item which leads to nasopharyngeal capillary dilatation, and consequent tissue engorgement; and the hypertrophied and exquisitely tender tonsil, in an acute tonsillitis in an adult, is the red flag which warns us of previous faulty food intake, or over-indulgence; and the enlarged and tender tonsil is, through bulk and sensitiveness, simply standing as an armed sentry for the stomach, demanding, because of difficult deglutition, that the digestive tract be given a rest.

Most patients overlook the warning, as given by the tonsil, and acrobatically contort a bolus of food past the guarding organ, in spite of the intense pain which accompanies the process.

Free elimination and fasting are the two big factors leading to quick recovery in tonsillitis; and I wish to say, in parenthesis, that the time is fast coming when it is going to be considered as disgraceful to exhibit a tonsillitis or a common "cold" as it now is to be vermin-infested, because either a "cold" or tonsillitis advertises unhygienic living and insufficient bodily cleanliness.

Mosquitoes and Hayfever

The second item I wish to submit is the possibility that the marsh mosquito may be an element in the propagation of hayfever.

To date, my experimental work, as to the marsh mosquito, has been limited, but I have demonstrated that, in susceptible individuals, hayfever symptoms have followed the bite of a marsh mosquito, which had lately come from a banquet on the nectar of wild cucumber blossom.

Query: Are the localities which seem to be palliative for certain hayfever cases marked by an absence of the marsh mosquito, or by an absence of a flora which would render the mosquito capable of deleteriously vaccinating the susceptible individual?

I am not offering the marsh mosquito as the sole cause of hayfever, because protein susceptibility of the mucous membrane of the upper respiratory tract is too well established. I am simply suggesting that the mosquito may have been overlooked.

Capillary Caliber

The third topic I wish to stress is capillary caliber, and its command over normal and diseased states.

A little thought will soon convince one that an abnormal capillary, either over-dilated or over-contracted, accompanies every pathological state, and that normal variations in capillary caliber determine normal physiological function.

(The reader, if interested, is referred to the following papers: "The Relation of Capillary Caliber to Normal and Pathological Sensation and Function," and "A Further Contribution, Relative to Capillary Caliber," *Medical Record*, Sept. 1, and Nov. 10, 1917.)

Tissue Resistance

The fourth item has to do with the *why* of tissue resistance as exemplified by the intestinal tract.

What a marvelous thing it is that the thin tissue of the intestine, carrying within its lumen the obnoxious ash or residue, made up of the by-products of continuous tissue metabolism, should possess the miraculous property of indefinitely protecting the sensitive peritoneal cavity from infection.

This mass of bacteria-laden detritus, which we call feces, traverses the thirty-foot intestinal tube, in a continuous sewage stream, from birth to death, the intestine coiled within a cavity lined with a serous membrane, avid for infection, and of a proper incubating temperature; yet this tenuous, gossamer-thin intestinal wall, while normally functioning, safeguards to perfection the whole peritoneal cavity.

Give an answer as to the factor which allows this marvelous protective property to function, and you will undoubtedly have solved the problem of tissue resistance. Is there an element in the intestinal wall which, if isolated, could aid in the regeneration and healing of various surgical conditions?

Milk Allergy

Fifth, I wish to protest against the universal and indiscriminate use of cow's milk as an article of diet.

Every treatise, book, magazine, pamphlet, "Mother's Letter," or Nurses' Mentor published advises the giving of so many ounces or pints or quarts of milk per day, to every child, regardless of parentage, hered-

ity, personality or anaphylactic abhorrence.

God made cow's milk for calves, and the majority of calves seem to get along beautifully upon the fluid which is intended especially for their needs, but literature cites few instances where a kangaroo's baby, or a hippopotamus' baby or a giraffe's baby, successfully arrived at maturity upon a calf's diet. The tissues of all the lower animals cannot successfully metabolize cow's milk; yet, we expect the tissues of our offspring to do so.

We must prayerfully keep in mind, appreciate and take advantage of the fact that *there is such a thing as anaphylaxis*, and also visualize that, with the possible exception of the egg, primarily promulgated for the purpose of hatching chickens (the egg being really an impregnated and detached uterus), milk is probably one of the least understood and most vicious food item, for indiscriminate use, in our whole dietetic armamentarium.

Until such time as we know more about cow's milk, why should we not keep in mind its possibilities as a metabolic tissue poison, in a certain percent of individuals and, at least, treat milk with the "suspected respect" it deserves?

Goiter and Goats

Sixth, I wish to call attention to the fact that the majority of mountainous "goiter regions" harbor flocks of sheep or goats.

Goiter is a common finding in sheep, and I am hoping that investigation may be instituted for the purpose of ascertaining what connection, if any, exists between water contamination by sheep or goats and the appearance of goiter in those human beings who are in close contact.

Eight years ago I wrote Dr. Ludvig Hektoen along the above lines, after getting replies to about fifty questionnaires regarding goiter cases, sent into the Ten Sheep region of the Big Horn Mountains.

The Lymph

Seventh, may I put in a plea regarding a more thorough investigation of the lymph and its possibilities as to being the most important fluid of the whole economy?

The scarlet color of the blood, together with its spectacular behavior in hemorrhage, seem to have hypnotized all previous investigators into the fallacy of paying too much attention to this bizarre fluid, to the detriment of the lymph.

During the many years in which the blood has been so minutely studied and analyzed, the humble lymph—a fluid drawn from every tissue of the economy (nature's own pluriglandular product)—in spite of the fact that it is continually pouring into the veins of the neck, has been overlooked.

(Note. The item of normal weight should, in theory, depend directly upon the lymph.)

Asthma

Eighth, I wish to protest against the universal empiricism, which designates the dyspnea of asthma, as being due to "bronchospasm," or spasm of the air cell. I am an ex-asthmatic, having suffered with the condition for over twenty years, and I feel, in consequence, that I am, in a small measure, qualified to testify in this case.

Between ten and twelve years ago I began experimental work upon myself along the lines of protein vaccinations, which eventually led to my becoming asthma-free, and I have since handled seventy-two cases of asthma, along the same lines. (See *Medical Sentinel*, Jan. 1923.) With this preamble, I wish to try to show that the dyspnea of asthma is not due to spasm of the air cell.

There are so many cubic inches of space, in a given thorax, and this inside dimension is constant, except for the excursions of the ribs and diaphragm.

If we take for consideration the lung tissue itself—that it is composed largely of a network of minute blood vessels which occupy the lung tissue conjointly with a maze of minute-air-containing spaces — it is evident that these two systems must adapt themselves to each other, along lines of bulk, in a space which is limited. For instance, should the lung capillary dilate, mechanics would demand that, within certain limits, the air cell be correspondingly compressed.

The immediate amelioration of the asthmatic seizure under hypodermics of adrenalin, which contracts the lung capillaries, together with the capillaries of the rest of the body, is due to the fact that the dilated lung bloodvessel no longer compresses the air cell, and the cell is simply allowed, through its own resiliency, to resume its normal size, shape and function, and the dyspnea disappears.

In asthma there has been no "bronchospasm," and no air-cell spasm, the action of the adrenalin being purely mechanical, i.e., contracting the mesh of blood vessels which surround the air cell, and allowing the cell to dilate.

Every textbook on asthma refers to this "spasm of the lung air cell," which does not exist, even to the point of empirically inventing the "spasm-relieving property"of adrenalin to bolster up a false hypothesis.

Believing that the dilated lung capillary, in asthma, is due to a protein anaphylaxis, just as definitely as the dilated skin capillary in "hives," I have lately been referring to asthma as an "urticaria of the lung," which designation, I believe, is far from a misnomer.

In conclusion, I may state that the penalty, since thought began, for the propounding of a new theory, idea or method, has almost invariably been either ridicule, rejection, ostracism, incarceration or death.

As a final query, I should like to ask: What is the psychological entity back of this universal mental state in mankind?

The Seven Wonders of the Medical World

By WILLIAM THACKERAY, M.D., Fowlerton, Texas

IN LOOKING over the *American Magazine* the other day, I noticed that the publishers wanted its readers to tell them, in a prize contest, what they knew of the seven wonders of the modern world, and this item suggested to me the idea of telling of the seven wonders in medicine that have come into existence since my advent upon earth.

I will class these as: Anesthesia, the discovery of Microorganisms, Antisepsis, Surgical wonders, the Active-Principle revolution in therapeutics, Chemical wonders and the advances in Pharmacy.

Anesthesia

It is in evidence that this subject interested the men who, in the dawn of scientific investigation, gave their attention to the relief of those suffering from the various ills that the human being is heir to, as is shown by the records on tablets and papyri of Egypt, Babylon and Chaldea. More recent data show that, centuries before the Christian era, the Chinese and Egyptians used cannabis indica, and the Greeks and Romans used mandragora for the purpose of relieving pain during surgical operations. While these drugs produced narcosis, they offered a surcease from pain and were, in a measure, a substitute for the transient effects of the anesthetic which was being sought to relieve pain during surgical or obstetrical operations.

Drug narcotism was in use up to 1795, when Dr. Pearson, of Edinburgh, used sulphuric ether for the relief of "spasmodic interference with respiration." In 1800, Humphry Davy suggested nitrous oxide as an anesthetic and, in 1828, Dr. Hickman advocated carbonic acid gas as offering "real anesthesia in place of narcosis."

In 1842 Dr. C. W. Long, of Jefferson, Georgia, used the method of the Edinburgh doctor in a surgical operation for the removal of a cystic tumor from the neck. In 1844, a dentist by the name of Wells, at Hartford, Connecticut, removed teeth, without pain, under the influence of the Humphry Davy method and, in 1846, Morton, a dentist of Boston, Massachusetts, made application for a patent for a disguised sulphuric ether, but failed in his attempt to gain a monopoly on this anesthetic.

Chloroform had been discovered, almost simultaneously, in Paris by von Liebig and Soubeiran and in America by Dr. Samuel Guthrie of New York. However, Dr. Guthrie was not certain of its composition, although it is probable that he realized its anesthetic properties before Sir James Y. Simpson reported its discovery in 1847.

On February 1, 1848, Dr. Guthrie wrote to his daughter: "I made the first particle (chloroform, 'sweet whiskey'), that was ever made and you are the first human being that ever used it in sickness. By breathing it a few seconds, the person falls apparently into a sound sleep, when breasts, legs and arms may be cut away, painful labors ended, and all without pain or injury."

Since 1842, the use of sulphuric ether, and since 1849, of chloroform, has become world-wide and surgical operations are now robbed of their terrors.

Local anesthesia is practically the child of yesterday. Even in my college days, the freezing of the surface with ethyl chloride was but little used; the advent of cocaine occurred in 1884, and this has been followed by substitutes whose name is legion. The best of the list I have found to be procaine.

Microorganisms

While there are hundreds of different species of bacteria, there are but three

general forms, to wit: spheres, rods and spirals, varying slightly in size. These minute bodies have been known since the last quarter of the seventeenth century; but it is only within the lifetime of the writer that some of them have become recognized as being the cause of many malign influences upon the human body, its functions and its organic structure. At the same time, it has been noted that there are a number of benign microorganisms which aid materially in the prevention of disease and in the more perfect digestion and assimilation of food.

Koch successfully differentiated the bacteria of tuberculosis, of cholera and of typhoid, as demonstrated by both ante- and postmortem experiments on animals.

While Koch was making his discoveries with the microscope, others were experimenting with his results, and Pasteur was working along the line of antitoxins to combat the toxins of the bacteria.

The life of the malignant bacteria is measured only by the means adopted for their destruction and by the accumulation of the products of their own activity. If these are eliminated, they are known to live and multiply for many years, possibly centuries.

Pasteur learned that these microorganisms contained the means for their own destruction and thus, robbed of their virulence, their attenuated virus could be used, by inoculation, as a prophylactic against the stronger toxins, just as bovine vaccine protects from variola. While this method has proved a great blessing to mankind, it has been further supplemented by the local use of the antiseptics.

Antisepsis

The antiseptic method of treating wounds and some foci of disease is, in reality, modern and has come into general use since I have been on earth. My own experience, since I recognized the necessity for the use of antiseptics, has been: that alcohol is the best of these agents and, even with the more recent chlorine discoveries, I look upon it with great favor even now.

Mercuric chloride, carbolic acid, sulphurous acid, iodoform, iodine and other chemicals have been looked upon by surgeons and physicians, during the past sixty years, as being, each in its turn, the last word in perfect antisepsis. During the war between the States, iodine and bromine were considered specific in the treatment of hospital gangrene; indeed, I wrote my graduation thesis upon this subject, the terrible disease being the *bete noir* of the surgeon in the base hospitals of our army during that unhappy time.

The World War, like every other world-wide catastrophe, produced men who have successfully met the extraordinary conditions which confronted them, and Dr. H. D. Dakin, the American, associated with Dr. Alexis Carrel, the Frenchman, produced a new antiseptic which has revolutionized the practice of modern surgery and rendered a lasting service to humanity.

The names of Wright, Dehelly and Dunham must be included with those of Dakin and Carrel, by reason of their studies and work in connection with the discovery of the new antiseptic and the aid given by them in the chemical, physiological and pathological investigations connected with the new product.

"Chlorazene is the sodium salt of paratoluene sulphochloramide. It is a white crystalline powder, practically odorless and of a salty, faintly bitter taste; freely soluble in water in the proportion of one to seven. It is stable in both powder and tablet form, and in watery solution; also in weak alkalies, but is decomposed by acids.

"Chloramine (English nomenclature), has no corrosive action even in concentrated solutions. It neither precipitates nor coagulates proteins, such as blood serum, a property which is of great practical importance in the treatment of infected wounds; it is practically nontoxic, guinea pigs and rabbits tolerating as much as one Gram per kilo, given subcutaneously, with no symptoms other than a mild local reaction due to the injection of a strong solution." *(Brit. Med. Jour.,* Oct. 1915.)

The superiority of chlorazene over the earlier antiseptics, in the destruction of septic bodies, has been proven beyond question and its nontoxic character gives it a prominence over mercuric chloride and carbolic acid which makes it the antiseptic of choice by all progressive men.

Surgical Wonders

Surgery has been practiced even longer than has drug therapy, as it is probable that accidents preceded disease.

A very interesting monograph was recently presented to the profession called: "Medical History in Sculpture" in which was shown "Earliest surgical operations pictured in the necropolis of Saqqara at

Memphis 2500 B. C." The British Museum also contains Theban and Babylonian tablets showing the early existence of surgical and obstetrical instruments similar to some of those now in use. The correct and elaborate bandaging of the Egyptian mummies shows a wonderful proficiency in this necessary adjunct to surgical work.

About the middle of the sixteenth century, Ambrose Paré, called the father of French surgery, commenced his public life as a barber, and in that vocation he learned the rudiments of surgery, as was common at that date. Indeed, at a much later date, barbers held the title of barber surgeons. The first public office occupied by Paré was that of a dresser at the *Hotel Dieu*, after which he was employed by Francis II as surgeon to his army and, at this time, he for the first time in history, employed the ligature in controlling hemorrhage from large arteries where formerly boiling oil and searing with hot irons had been employed.

After Paré, Galileo, Bacon and Harvey added to the knowledge of the structure of the body and the functions with which it is endowed. In the 17th century, Richard Wiseman was called the "Father of English Surgery" and, in the 18th century, James Douglass of Scotland, Bell and John Hunter of England, added to the importance of the work done by the immortal Paré.

Samuel D. Gross, Joseph Pancoast, Louis Sayre, Valentine Mott, Frank Hamilton, Eben Swift, of the United States, and the great Italian, Nelaton, all contributed their quota to the growing science. Even at that late day, abdominal surgery was looked upon by American surgeons as too heroic to be performed without consultation with and consent of men of reputation in surgery, and even then as a *dernier ressort* to save lives.

I shall never forget the discussions around the operating table, upon which lay John C. Breckenridge, one time Vice President of the United States, where Gross, Sayre, Bartholow, a surgeon from Louisville, Kentucky, and a local doctor discussed the conditions and the possibility of saving the life of the patient, the result of which is historical and needs no introduction here.

It was about this time that the Austrian, Theodor Billroth, began to make a reputation in abdominal surgery and, while he attracted many students from America to Vienna, among them the late John B. Murphy, his teachings were not held practicable, in the United States, without the safeguards already outlined.

It was nearly ten years later, when an English surgeon, Joseph Lister, established what is known as antiseptic surgery and this system has been universally accepted. It has revolutionized modern surgery, removing many of the most serious dangers, thus adding to its field of usefulness.

Mr. Lister was recognized by his government as a benefactor to the world, and was rewarded by knighthood in 1883 and by a peerage in 1897.

The door opened by Lord Lister has been entered by the surgeons of all civilized nations, and by none more enthusiastic or successful than those of our own country.

The Active Principle Revolution

Memory goes back to my boyhood days, when sulphur and molasses, senna, mauria and salts, powdered peruvian bark in teaspoonful doses and other nauseous things were frequently administered, sometimes by force, for our fevers, colds and bilious attacks. The corner drug store was a place of miracles where the dreaded doctor conspired with the man behind the counter in creating the disgusting compounds for the unfortunates who came under their hands.

Later, I became one of these conspirators, in the early fifties of the last century, and I remember my first work as an apprentice, that of powdering aloes and canella sufficient to make five pounds, of what the laity called "Hiry Picry." The taste of those two drugs haunts me even now.

Galenical preparations held their position until 1866, when Adolphe Burggraeve, a Belgian surgeon, commenced his studies in therapeutics which resulted, in 1868, in his introduction to the medical prefession of Belgium of, what he called, "Dosimetry," and in a complete revolution in the practice of medicine.

Dr. Burggraeve demonstrated conclusively that, in using crude drugs, or the galenical preparations of the same, no dependence could be placed upon the certainty of their therapeutic action, that most vegetable drugs were compound in their construction, containing two or more active ingredients which were often the antithesis of each other in therapeutic action; as for instance, pilocarpus jaborandi, the pilocarpine alkaloid being a promotor of the secretions of the sudoriparous glands, while the jaborine alkaloid, acts as a positive check to these secretions. Opium contains several narcotic

principles, notably morphine, codeine, thebaine and narcotine, all varying in relative quantity in different specimens. Thebaine acts like strychnine as a convulsive poison while apomorphine (an artificial product) is an active emetic.

Most other vegetable drugs are constructed in like manner and vary, in active principle content, by reason of location, wet or dry season and exposure to varying temperatures, consequently further examples are unnecessary.

The force of the arguments of Doctor Burggraeve was soon recognized by his confreres in Belgium and he carried his work into France, Spain and Italy; each of these countries produced men who, realizing the failures that they had met with in the past and recognizing the truth of Burggraeve's statements, soon produced a change in the medical practice of Latin Europe, and the several countries named rewarded the Belgian doctor with both social and financial honors.

The French government installed Dosimetry in its Army and Navy, and a veterinary surgeon wrote: "Before this, it required eight mules and two wagons to carry the medical supplies for a squadron, while, now, I can carry a supply for a regiment on my own person."

The work was now transferred to England, where Dr. Arthur Allbutt of Leeds and Dr. Phipson of London did excellent work in presenting Dr. Burggraeve's ideas to their medical brethren.

In 1889, I commenced the work of introducing Active Principle Therapeutics (Dosimetry) into the United States. In New York, New Orleans and St. Louis there were a few individuals who were practicing it, obtaining their supplies from Paris; there being no American literature or medicines. In conjunction with Dr. C. C. P. Silva, I translated the "Dosimetric Practice" of Dr. Burggraeve into English, and published it, first, as a serial in the *Western Medical Reporter* of Chicago and later in book form which rapidly passed through three editions. We also founded, with a few friends, a corporation for the commercial production of the drugs and dosages recommended by the Belgian doctor.

I visited various county and state medical societies and read papers upon active principle therapeutics and, through the kindness of Professor James Etheridge, I lectured upon this subject to the classes of Rush Medical College. It was my talks in the Cook County Medical Society that attracted the notice of Dr. Wallace C. Abbott and he became an enthusiastic disciple. In 1890, I published a journal which I called *The Alkaloidal Clinic*, and which I used for the propaganda of the new departure in therapeutics.

Dr. Abbott founded The Abbott Laboratories, one of the largest chemical and pharmaceutical laboratories in America, and he also made *The Alkaloidal Clinic*, now CLINICAL MEDICINE, one of the largest and most influential medical journals in the United States.

The day of galenicals has passed and the day of certainty in physiological action, as well as clinical positiveness in medicine, has dawned.

Chemistry

The early history of Chemistry shows that the Egyptians and Chinese were on a par in chemical knowledge but along different lines. Egypt showed its proficiency in the preservation of the bodies of their dead, their use of mordant dyes and in their manipulation of earthy and metallic alloys in the construction of glass, tiles and vases.

The Chinese showed about the same acquaintance with the alkaline earths and metallic alloys, as well as the manufacture of porcelain and paper.

The Greeks and Romans borrowed from Egypt but added nothing to it, and the irruption of Attilla and his huns obliterated that which they had learned.

From this point until the beginning of the eighteenth century, chemistry occupied, in Europe, a mixed class of quasi scientists who called themselves alchemists and whose sole aim appeared to be the discovery of the elixir of life and the transmutation of the base metals into gold. Even as late as 1792, this manner of producing gold was supposed to be practicable.

In 1718, a table of chemical affinities was first published. In 1732, there appeared a treatise on the chemical relations of heat and light and in 1756 it was shown that the carbonic acid of respiration and that of the action of acid upon chalk was different from the air of the atmosphere.

Discoveries in gasses, acids and alkaline earths followed in the succeeding years until 1791 when Galvani published his treatise on Galvanic electricity which prompted Humphry Davy to make his study of metals and gasses with most important results.

Gay Lussac, Thenard and Berzelius added

to the knowledge already acquired, and the treatise on atomic weights by the last named scientist still remains standard. Berzelius was also the author of the electrochemical theory which was perfected by Faraday and others.

This brings us to the work of Michael Faraday and within the time of my personal knowledge. In 1847, Faraday discovered the magnetic character of oxygen and many other facts in connection with electrochemistry. The interest of the writer, however, was and is concerned with chemistry as applied to therapeutics and its dealing with vegetable drugs. As early as 1855, when my connection with the apothecary business commenced, I noticed in our poison closet several small bottles, containing a white amorphous powder, and labeled aconitia, strychnia and atropia. I was informed by my preceptor that these were alkaloids from aconite, nux vomica and belladonna and that they were there only as curiosities, that they were not used in medicine as they were too dangerous to be used internally. In fact they were not to be handled with impunity.

It appears that it was only in the nineteenth century that chemistry interested itself in determining the alkaloidal content of vegetable drugs and in using the termination "a" instead of "ine" as at present.

There is in existence a painting that I have seen, showing Nero and his preceptor, Seneca, watching the dying struggles of a negro slave, said by the artist, to be the Roman Emperor "studying the effects of strychnine which was discovered by Seneca." Strychnine was not discovered, or rather isolated, until 1828. The first poisoning was done in London, in 1855 and the perpetrator, Palmer, was hanged for the crime in 1856. This happened in the same year that I became a student in chemistry and pharmacy.

From 1855 to 1866, new alkaloids appeared in the chemical market while Powers & Weightman and Rosengarten, both of Philadelphia, were practically the only chemists, at the earlier date, who gave their sole attention to this branch of chemistry in America.

In 1811, quinine had been isolated by a European chemist. In 1816, morphine, the first of the opium alkaloids, was isolated and identified medicinally.

To close this part of our study, there is the greatest of all discoveries and wonders, in chemistry, the work of Madame Curie, in the discovery and production of radium, in 1898, and since that date this wonderful substance, separated from hornblend, has been adopted by the medical profession for the treatment of keratoses, lupus and other varieties of tuberculosis of the skin and with some success in carcoma and carcinoma, with the prospect that, when the full power of the new element has been learned, we shall have become masters of that curse of humanity—cancer.

Pharmacy

The apothecary of 1855 powdered, in his laboratory, all drugs used, there being no drug millers at that time. He manufactured his tinctures by maceration and confined his business to crude drugs, chemicals and galenicals which were official, and the unofficial family remedies which had become standard by long use. He looked upon patent medicines with great disfavor and would not tolerate them in his shop.

My master apothecary, Mr. Moore, was the first to make a sugar-coated pill. Prior to this time, patients took their pills, *au naturel*. Just before 1861, Tilden & Company had commenced the manufacture of a new class of galenicals, called fluid extracts, each pound of drug being represented by one pint of the extract. About this time, John Wyeth & Brother introduced their line of elixirs and other products to the medical profession.

Dr. Edward R. Squibb, one time surgeon in the U. S. Navy, resigned his commission and entered the manufacturing field in order, as he said, "that the Government might have honest medicines."

In the early days of the war between the States, there was an investigation, somewhat more strenuous than those which are engaging our solons, and which resulted in some solitary days spent by at least one manufacturing pharmacist.

After the war, many manufacturing pharmaceutical chemists came into prominence, until now the list comprises a firm in almost every large city in the United States and the result: The apothecary of the past is only a memory and the business man of today offers a variety in his drug store almost on a par with the department store which, by the way, has its drug department, in many instances, equal to the store which is supposed to devote itself to the sale of medicines but in reality lends itself to less professional ends.

I must say for the new condition that the doctor gets a more accurate filling of his prescriptions when he specifies this or that

make of pill, plaster, ointment or extract, than he did in the old days, as the skill and knowledge, as well as the machinery employed by the great manufacturers, is far beyond the hand work of the older apothecary.

Colitis

By CHARLES J. DRUECK, M. D., Chicago, Illinois

Professor of Rectal Diseases Post Graduate Hospital and Medical School

SYNONYMS—Mucous colic, mucomembranous colitis, catarrhal colitis, myxomembranous colitis, myxorrhea.

Colitis is not a disease entity, although it may present the clinical appearance of being an independent disease, but is part of the manifestation of a functional or organic disturbance, or an infectious enteritis, and is commonly an accompaniment of organic obstructive disease of the colon and also dysentery. The terms idiopathic and catarrhal colitis, implying that the disease arises spontaneously and not in consequence of some other morbid condition, are not acceptable because certain other factors are always present.

Classification of types of colitis is meaningless because mucous colitis differs from membranous colitis only in degree and, if aggravated, the condition goes on to ulceration or hemorrhagic stages. If increased peristalsis and diarrhea are complained of, a mucous colitis appears, while during the constipated periods a membranous colitis is present.

The disease may occur at any period of life, from infancy to old age, and, contrary to the prevailing belief, is encountered, quite commonly, in males, as well as females.

Though mucous colitis is of frequent occurrence, yet it appears to be infrequently recognized. The importance of its recognition is evident if we realize that, although at times the condition of the bowel may be merely incidental to more important lesions, it is often most prominently associated with serious states of physical debility or of mental instability.

Predisposing Causes of Mucous Colitis

Many patients exhibit mucous manifestations of abnormal endocrine functions and the disturbance of one organ or gland is apt to demoralize the proper balance of the vegetative and autonomic systems. This type of disturbance is sometimes erroneously described as secretory or motor neuroses of the large intestine when, in reality, it is a collection of symptoms resulting from various systemic disturbances. A very well-known analogy occurs in disturbed thyroid secretion where diarrhea is a constant symptom.

Mechanical obstruction also interferes with the secretory and metabolic functions of the bowel. Sometimes, excessive indulgences in coffee, alcoholic drinks, tobacco or spices may add their toxic factors; or, in other instances, a restricted diet deprives the body of its necessary quantity and variety of food.

There has been, of late years, a good deal of investigation directed toward demonstrating that focal infections, such as infected teeth and tonsils, an infected appendix or an infected gall-bladder, may cause colitis by producing hematogenous septic infarcts of areas of the mucous membrane. Rosenow has particularly called our attention to this point.

Bacterial infection accounts for many colitis cases. It is, however, not always possible to determine which microorganism is the exciting agent because many strains are usually found, but we know that certain bacteria are commonly associated with certain definite lesions.

The habits of defecation vary with each subject, from the sluggish evacuation of large size produced only by the exhibition of cathartic drugs or an enema and then accompanied by flatulency and colicky pains, to the other extreme where the individual has frequent soft, mushy or diarrheal movements or evacuations of enormous quantities of mucus. These attacks may come on so suddenly as to appear to be an acute disorder, but will usually be found to follow unusual nervous strain where the individual has overtaxed his physical or nervous strength. Sometimes this excessive expenditure is more or less continuous as in school study, domestic worry or business cares.

It is, therefore, important that we make repeated, thorough examinations of the excretions in each and every case.

Types of Colitis

A careful study of the stools of these in-

dividuals usually shows that, where the bacilli coli preponderate, the colon is atonic with a flat, thin mucous membrane, having a dry surface. There is thinning of all of the coats of the bowel and, clinically, intestinal toxemia is found.

Where the anaerobic bacilli are noted, saccharo-butyric fermentation is the rule, the mucous membrane of the bowel is moist, there is much mucous produced and the mucous membrane is hypertrophied. Here the bacillus aerogenes capsulatus is most often found.

With our present meager knowledge of this disease, based on the pathological findings, it is impossible to make a scientific classification of cases, although sigmoidoscopic study of the pelvic colon invariably shows changes in the mucous membrane. There are so many complications present that striking differences are always found in any two patients and our colonic findings must be amplified by repeated examinations of the abdomen. It is our opinion that in every case a vicious circle is established. By the failing nutrition, anemia develops which lowers the resistance and endurance of the individual. A second factor is the psychasthenia and excitable character of the individual (exaggerated nervousness). Endocrine and metabolic disturbances may also be predisposing factors. A combination of these influences upset the colonic functioning, thus causing toxemia. One of nature's protective efforts is the over-production of mucus which engulfs myriads of bacteria and hurries them out, thereby producing the diarrhea. After the accumulated toxins and fecal matter have been cleaned out, a quiescent period follows until the nervous system and metabolism are again upset. Thus these crises periodically recur.

Etiology

Among the organic obstructions which may cause colitis are:

1. Disease of the bowel itself, as carcinoma, syphilis, nonmalignant stricture, fecal impaction, chronic tuberculous disease, mobile cecum, intussusception of the sigmoid, and diverticulitis.

2. Extracolonic obstructions, as adhesions between the uterine appendages and the colon, malformations of the uterus and floating kidney.

3. Functional failure of other abdominal viscera, such as enteroptosis, enterospasm, insufficiency of the liver, chronic appendicitis and cholecystitis.

Diagnosis

Bastedo[1] speaking of the diagnosis of mucous colitis says:

"As there is no distinguishing factor other than the mucus, the diagnosis rests on: (1) the observation by the patient of the passage of mucus, either as strings accompanying the feces or as a complete mucus stool; (2) the finding of the characteristic mucus in a stool submitted; (3) the detection of the characteristic mucus after a test dose of castor oil or a test colon irrigation, or (4) the observation through a sigmoidoscope of a dry mucous membrane in the upper rectum to which are clinging heavy, tenacious sheets of mucus. If mucous colitis is sought only when there is colic, many of the most important cases will be overlooked.

Mucus

This is tenacious and appears mostly in yellow, brown or sometimes black jelly-like masses, or in more or less desiccated plaques, strings, ropes or scab-like membranes. The strings may be many inches in length and, on being teased out in water, prove to be casts of the bowels, or broad ribbons. Patients sometimes mistake them for intestinal worms. The mucus adheres with great tenacity to the wall of the bowel, so that when encountered postmortem it is removed with difficulty, even with forceps; von Norden reports that he was unable to drive it off with a strong stream of water from a hydrant. Hence, it is not uncommon to find blood spots on the expelled mucus, as if it had been torn away like a scab. As a rule, the mucus bears only a few leucocytes and is without fibrin. In some of the persistent cases. I have frequently noted about the mucus an odor that is entirely different from that of the stools, slightly suggestive of dead fish just thrown on the beach and before they have become offensively putrefactive.

Besides mucus, there are occasionally found quantities of blackish or brownish, gritty, irritating intestinal sand. Some authors report the frequent presence of blood in the stools (Mummery found it in 60 percent of cases), mostly when scab-like membranes come away. It is regularly present in cancer cases, and frequently with polyposis; but in these cases the mucous colitis is not the important feature.

Pathology

The changes are indefinite; the colon sometimes shows very slight alterations or even rarely no recognizable lesion, but usually the

mucous membrane is more or less damaged. In some of the colons removed at operation, the mucous membrane of the cecum and ascending colon had revealed universally distributed areas of inflammation, and the whole wall of this part of the intestines has shown atony, dilatation and poor nutrition. In some cases, Keith has demonstrated absence of the normal nerve elements of Auerbach's plexus with consequent cecal and colonic stasis.

The colon is often redundant or looped, and there is sometimes laxity of the abdominopelvic walls with ptosis of the transverse colon and of one or both flexures, with perhaps a movable cecum. In the persistently toxic cases, pyorrhea alveolaris and gastric achylia are not uncommon findings. Rarely cancer of the colon, polyposis, diverticulosis or some other localized lesion may underlie the condition. Not infrequently the descending colon is found in a spastic state.

When the patient presents himself for examination, we must be absolutely sure that he has mucous colitis. The first symptoms of an early malignancy, or ulceration of the bowel, which may be either simple or specific, resemble closely those of mucous colitis, and many patients have been treated for "mucous colitis" until it was too late to operate for a malignant condition which really was the cause of the trouble.

Symptoms

The symptoms of colitis vary with the patient and in the same patient from day to day. The principal manifestations, however, are irregularities of the fecal evacuations; abdominal pain and tenderness; intestinal putrefaction; toxemia and neurotic manifestations.

Diarrhea

The patient usually presents himself during one of the diarrheal attacks, complaining of bloody stools. In the mild cases the blood-tinged mucus is voided only at the time of defecation, but, in the severe cases, there may be several evacuations, perhaps as many as ten each day, of quantities of almost colorless mucus and strings (tubular casts of the bowel). Upon careful interrogation, a history is obtained of habitual constipation, interrupted periodically with attacks of looseness of the bowels, associated with flatulence and abdominal discomfort, usually worse at night or after partaking of hot drinks.

Constipation

After each diarrheal attack has subsided, the abdominal rest and constipation recurs. If the patient seeks a physician at this time, it is not because of the colitis but rather an account of a persistent constipation, lack of physical energy, obstinate or recurrent headache, failure of physical or intellectual vigor, mental depression or nervous prostration. In some cases several stools a day are passed; yet, constipation exists because of the insufficient or retarded defecation.

Intestinal Putrefactive Toxemia

The neurotic manifestations and the condition of mental and physical fatigability may, in many instances, be traced directly to a chronic toxemia caused by the absorption of harmful chemical substances found in the bowel. It is probable not only that the constipated bowel of mucous colitis favors bacterial proteolysis but also that the damaged mucous membrane promotes the absorption of deleterious material. There may be colitis without putrefaction of the colon contents, or there may be putrefaction of the contents without colitis; but the two conditions are often associated. At all times our patient suffers with some of the popularly called symptoms of indigestion, namely: a coated tongue; gastric hyperacidity; intermittent achylia; lack of appetite; or dreamy troubled sleep; and treatment is at times directed to these conditions when the real etiology is in the large intestine.

Pain

Abdominal discomfort is ever present. It may range in intensity from nothing more than a little soreness to paroxysms of the most distressing colic. It is usually exaggerated by the use of laxatives and is particularly sharp just before, during or following defecation; its location may be variable or constant. This pain or soreness differs from that of ordinary colic in that it is made worse rather than relieved by abdominal pressure. At times, the whole colon is found to be tender. Sometimes, a period of constipation ends with the appearance of abdominal pain and flatulency leading to a diarrheal attack which brings the sufferer relief. In some instances, the pain has been so severe and constant that a futile operation has been performed for some other abdominal or pelvic lesion.

Pruritus

Occasionally, I have seen pruritus ani, urticaria and angioneurotic edema—complications which suggest either protein sensitization as a result of absorption of

minute amounts of unchanged protein through the diseased bowel wall, or the possible absorption of some chemical found in the bowel. Histamin is, at times, a product of intestinal putrefaction, and when absorbed in sufficient amounts is capable of producing urticaria and angioneurotic edema.

A test diet followed by a careful examination should be made in every case to locate the lesion and study the haustral contractions and spastic areas. Spastic portions of the colon always indicate regions of irritation and toxemia. Mechanical obstructions may be defined; also dilatation of the cecum, chronic appendicitis, angulations and strictures.

Lesions in the ascending and transverse colon are nearly always accompanied by much autointoxication, while those in the pelvic bowel, because of the dry feces and the lack of absorption, do not show toxemia.

Treatment

The treatment of colitis must always be individual, never routine, taking into account the sympathetic nervous system, the endocrine and metabolic organs, the patient's domestic and industrial life, the evidences disclosed by repeated careful abdominal and sigmoidoscopic examination, together with bacterial and chemical studies of the feces. The treatment is long and tedious (Bastedo estimates that a year is the minimum time in which a cure can be effected), and is directed at the preventation of the accumulation of mucus, and at the removal of the associated conditions, such as colic, constipation, intestinal toxemia, disturbed gastric conditions, bad mental states and depressed general health.

Palliative treatment is directed toward the relief of the attack. In most instances it is advisable to begin with a full dose of castor oil (one ounce) and the administration of a soapsuds enema before the oil has had time to act. This acts by making vigorous peristalsis, which, coming from above the mucus, tends to separate it, from above downward and to carry it onward, while at the same time it abolishes spasmodic obstruction through the peristaltic reflex, which produces dilatation below and contraction above. No food is allowed at this time but water is given freely. After the oil has acted, transintestinal lavage with four percent sodium sulphate solution quickly produces detoxication by prompt and effectual removal of all offensive material from both the small and large intestines.

After the bowel has been cleansed, an anticonstipation diet is ordered. Water must be taken freely. I urge my patients to take a cup of hot water containing the juice of one-half lemon on arising and to follow with a glass of ordinary drinking water (not ice water) every hour until noon. This provides eight glasses of fluid which is eliminated before the individual retires and therefore does not disturb his sleep.

Hygienic Treatment

The bowels must be regularly, promptly and thoroughly emptied. No permanent results will be obtained until the patient has free and satisfactory evacuations. It is well to cultivate a habit of an early-morning defecation and our patient must make several such efforts each morning even if no success is obtained at the beginning. If the desire for stool comes on later in the day, it must immediately be satisfied. By this practice thorough evacuations are obtained without resort to purgatives.

(a) To overcome accumulation of mucus, one of the best measures is a weekly purge with castor oil, or perhaps calomel and salts, or a purgative blue mass or calomel pill. This may be supplemented by colon irrigations every day or two for a week, and then every three or four days for two weeks, or once a week for a longer period of time.

Dietetic Treatment

Bacterial action on the end products of protein digestion produces most of the autointoxication and is therefore detrimental to these patients and proteids should, so far as possible, be replaced with fats and carbohydrates. An effort should be made to select from the foods customarily taken by the patient, and which are therefore more palatable to him, always remembering that the physical requirements must be kept up in all cases; but meat, fish, fowl and eggs are to be allowed only sparingly, the caloric values being kept up by adding cream, olive oil, yolks of eggs and fresh butter. Carbohydrates, such as the cereals and rice, are our mainstay. Fruits, raw and cooked, should be taken at each meal. Cane sugar should be replaced with honey or milk sugar. Tea, coffee and alcoholics are forbidden. Milk is permitted by some clinicians and objected to by others. I permit milk with soups and gruels. In all cases the diet should be ample and its quantity insisted on, for these patients readily acquire the habit of undereating because of a suspicion that

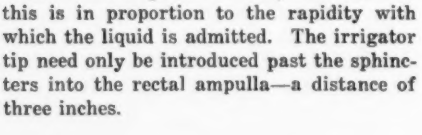
this, that or the other article of food does not agree with them.

Local Treatment

Much relief is obtained by colonic lavage but it must be properly and carefully conducted. All clothing should be loosened or removed from the abdomen and the patient placed in the lateral position for the first gallon of water admitted to the bowel in order to clean out the lower colon, and then on the back for the rest of the irrigation in order to enable the fluid to reach the cecum. Some clinicians prefer the knee-chest position throughout the whole treatment. This latter position is not comfortable for the patient.

Sometime preceding the lavage, the bowels should be emptied, if necessary, by an enema, in order to avoid carrying feces back to the cecum and to avoid starting up by the lavage the defecation reflexes which will prevent the passage of the water into the upper colon. The liquid used should be rather hot, and I regularly employ tap water, though occasionally sodium bicarbonate solution, a dram to the pint, is used (sodium bicarbonate is changed to carbonate by heat). Physiologic sodium chloride solution is not employed because it makes the patient thirsty. The amount required is usually 12 to 24 quarts, and it should be given slowly, with the reservoir about two feet above the patient. Frequently the putrefactive cecal contents are reached only after 4 or 5 gallons have been employed. If the irrigation does not bring out the mucus, this may be expelled one or several hours later. I always consider an irrigation a failure if no water is retained to be evacuated after the irrigation is finished, or if the water returns clear throughout; obviously, in such cases the liquid has failed to get past the spastic descending colon or sigmoid.

Some enterospasm is always excited and this is in proportion to the rapidity with which the liquid is admitted. The irrigator tip need only be introduced past the sphincters into the rectal ampulla—a distance of three inches.



Return flow rectal irrigator.

Where much pus or bleeding is evident, I have sometimes substituted a two-percent solution of ichthyol or calumba for the flushings, with happy results.

To relieve enterospasm, an injection is given at bedtime of one-half to one pint of warm olive oil or cottonseed oil, to be retained over night or as long as possible, a towel being placed over the anus and a rubber sheet on the bed as protection in case of leakage. This injection is often followed by passage, a few hours later, of the oil, and an abundance of mucus, with disappearance of the colic and no recurrence for a long time, if at all.

Some patients also suffer considerable enterospasm and even shock following the administration of an enema or lavage. This may perhaps be relieved by the application of a large, hot abdominal pack, but if this fails the flushings must be discontinued.

Sometimes a cathartic taken the same night as an irrigation that seems unsuccessful may bring away great quantities of mucus that has apparently been softened by the irrigation water.

Medicinal Treatment

The chief indication for drug therapy is to relieve the constipation and to this end the author's experience has been most satisfactory with trans-intestinal lavage twice weekly. Others prefer an occasional dose of castor oil (1 ounce at bedtime).

For the diarrhea, salicylate of bismuth, five grains every three hours, affords great relief and for the hyperacidity of the stomach Lynch[2] recommends one teaspoonful of peroxide of hydrogen with meals.

Surgical

If there is any definite surgical condition in the abdomen, such as appendicitis, cholelithiasis, adhesions, bands or pelvic disturbances, it should be overcome.

Neurotic Patients

The definitely neurological patients are most difficult to help because they persist in doing those things which they ought not to do and do not do those things which they ought to do. Here we must enforce a full quota of rest, restriction of social functions and late hours and abstinence from tobacco and alcohol.

Nervous excitability and pain may be relieved by rest in bed, a large dose of bromide, ½ to 1 dram, or barbital grs. 5 to 10. Enterospasm is best controlled by a hypodermic of atropine sulphate 1/60 gr. and hot applications to the abdomen in the

form of an electric pad or the electric blanket, hot stupes or a hot bath. Because of the habit-formation in neurotic subjects, opiates should not be used at all, not even in the form of opium suppositories.

A sojourn in the country or at a rest cure free from domestic and financial worries, together with a course of baths, is most beneficial. It is said that a successful physician with a deep perception of human incompatabilities had a colitis case with markedly neurotic symptoms whose overanxious wife was constantly appealing to the doctor until the wise medical man said: "Madam, your husband needs a rest. One of you must take a vacation."

These patients are anemic and in poor general health and, aside from the colonic indications, they need improved hygiene, better food, fresh air and cleanliness. Tonics like elixir iron, quinine and strychnine, one dram with each meal, or malt extract or the glycerophosphates, must be constantly exhibited, but the type of tonic must be changed occasionally.

Ulcerative Colitis

When the destructive agents exciting the colitis have become sufficiently aggravated, they produce extensive ulcerative changes. The original bacterial cause may have been the ameba dysenteriæ, tubercle bacillus, streptococcus or colon bacillus; but, when tissue necrosis has occurred, other hordes of intestinal bacteria contribute to cause a mixed infection and the clinical condition continues regardless of the presence or absence of the original type of infection.

Polypoid Colitis

Polypoid excrescences may develop in any chronic inflammatory disturbance of mucous membranes, when associated with ulcerative changes. During prolonged ulcerative process in the colon, deep erosions extend through the mucosa and islands or tags of mucosa with the submucosa are left. These are more frequently found along the line of the attachment of the mesentery. Bassler[3] suggests that, as this arrangement coincides with the blood supply of the bowel, it is probable that the blood supply of these small and localized areas may have been sufficient to withstand the destructive action of the inflammatory process so that necrosis did not take place, and a productive hyperplasia of the mucous glands and the submucous connective tissue with consequent polyp-like formations ensues.

These cases begin as a general colitis, going on to ulceration which is usually extensive, at which time ragged tags of mucosa are seen hanging from the surface of the bowel. Hewitt and Howard[4], from a study of their cases, conclude that "As the process ameliorates and healing begins, the irregular margins of these tags become smoothed off and remain as rounded, sessile elevations or as polypoid projections of the mucous surface. The portions of the mucosa that remain in these regenerate over the surface around the base of the pedicle and, if conditions remain favorable, ultimately cover the barren and denuded submucosa, together with the submucosa over the muscular layer. The mucosa may thus be completely restored and with its numerous scattered polypous projections, present a perfect picture of colitis polyposa.

Coincident with the process of healing and later, the proliferated fibroblasts begin to contract as in the cicatrization of a wound. This leads to an occlusion of the orifices of certain of the tubules situated in the polypi and over the mucosa between the polypi. There is an accumulation of secretion in these occluded tubules with the ultimate formation of retention cysts. These, of course, increase in size as long as there are secreting cells in their walls, and as there are a greater number of tubules over the surface of the polyp than over the surface of the mucosa, the polyp may appear as a collection of small cysts which Virchow has designated as Colitis Polyposa. It is the end stage of colitis polyposa.

---

1. Bastedo, W. A.: J.A.M.A., Jan. 24, 1920, p. 240.
2. Lynch, Jerome: Diseases of the Rectum and Colon, p. 333.
3. Bassler, Anthony: Diseases of the Intestines and Lower Alimentary Tract, p. 274.
4. Hewitt, J H., and Howard, M. T.: Chronic Ulcerative Colitis with Polyps.

Vincent's Angina Developing During Arsenical Treatment for Syphilis

By ROBERT E. JAMESON, M.D., Davenport, Iowa

THE following cases will, I believe, convince us of the possibility that patients who have syphilis may develop a Vincent's angina infection of the mouth or tonsils, or both, during the time that they are under arsenical treatment.

During the past three years I have had such experiences in three cases of my own and in the *J. A. M. A.*, December 13, page 1919, Dr. Sutton, of Hollywood, Calif., reports the following case:

Female, single, age 31, had developed a chancre three months previously. Examination showed a maculo-papular eruption; general glandular enlargement; blood Wassermann strongly positive. The patient, having a diagnosis of syphilis, was advised to take antisyphilitic treatment, and received three intramuscular injections of sulpharsphenamine, given every other day. When she appeared for her fourth treatment she complained of feeling ill and had a severe sore throat. Examination showed the following: Temperature 102.3° F., pharyngeal mucosa fiery red and showing a few vesicles; submaxillary lymph glands enlarged; the initial lesion was entirely healed. A gargle was given the patient and in twenty-four hours she was again examined, when superficial ulcers were noted on pharynx extending over tonsils. A dark-field examination showed many large spirochetes with shallow irregular undulations, easily distinguished from the spirocheta pallida. A smear stained with carbolfuchsin was found to contain many spirochetes and fusiform bacilli. Local treatment was administered and the Vincent's angina infection was brought under control within six days, after which sulpharsphenamine injections, intramuscularly, were again resumed. The three following cases were my own.

Case Reports

Case 1. A young man, 19 years old, white, single, delivery man, had been under treatment by his family physician for a week or ten days for sore throat which did not respond to treatment given. His physician then became suspicious of its being chancre of the tonsil and sent him to me for an examination. The left tonsil was inflamed and had a punched-out lesion which I diagnosed as chancre. He showed enlarged lymph glands in the cervical region, and a blood specimen showed negative Wassermann. The patient was advised to have a dark-field examination made, but, being without sufficient funds, he refused to have this done. He was advised of my diagnosis which was, chancre of the left tonsil, regardless of the negative Wassermann (two blood Wassermanns taken within two weeks were also negative).

I advised antisyphilitic treatment, which was begun with neoarsphenamine, intravenously. Twenty-four hours after the intravenous neoarsphenamine, the severe pain in the throat was relieved and the patient could swallow with less pain and take hot liquids without the former pain in the mouth. He was given, in all, six intravenous injections of neoarsphenamine at weekly intervals, but after the sixth injection I did not see him again for two weeks.

One day a physician called me up and asked me if I had been treating a Mr. B. I advised him that I had, but had not seen him for two weeks. He wished to know what I had been treating him for and I gave him the facts as stated above and the reasons. But, having three negative Wassermanns, he was seemingly convinced that he did not have syphilis and so advised the young man. A further examination was made and a diagnosis of Vincent's angina given by the attending physician.

I have not seen the patient since then, so I do not know the final outcome, but I would, at this time, like to make a blood Wassermann and, if necessary, a spinal-fluid Wassermann. I am still of the opinion that, if this patient has not had further treatment for syphilis, one could find evidence of infection at this time, for it is possible for one to have syphilis and be under arsenical treatment for the syphilitic infection and develop Vincent's angina.

Case 2. Male, 44 years old, laborer, married; had previously been treated for syphilis, having had three courses of antisyphilitic treatment, consisting of eight neoarsphenamine injections, and twelve intramuscular injections of mercury salicylate with potassium iodide by mouth. After each

course of treatment he still had a 4-plus Wassermann.

Some three weeks after the last treatments he reported to his physician stating that he had a sore throat. Examination by the darkfield method showed him to have fusiform bacilli (Vincent's angina). he was very weak and unable to swallow, saliva flowing from the mouth continuously. The patient states that he had first noticed his condition some ten days before, and that it had gradually grown worse, so that, at this time, he was unable to take sufficient nourishment.

He was told that he had a Vincent's angina infection of the mouth, tonsils and throat and advised to go to the hospital, where the following treatment was given: 20-percent neoarsphenamine in glycerine was applied to the gums and the entire mouth every four hours, day and night; and applied as above mentioned. 0.6 Gm. neoarsphenamine was given intravenously the first day he was in the hospital and, after twenty-four hours, there being no improvement in any of the symptoms, the glycerine and arsenical preparation was increased to 40-percent strength.

The patient gradually grew worse and, on the seventh day, he died.

Case 3. Male, single, age 32, laborer, reported for examination, which revealed the following: generalized secondary rash; blood test showed 4-plus Wassermann.

Antisyphilitic treatment was advised and neoarsphenamine was administered intravenously. He received, in all, 5 intravenous injections—one of 0.3 Gm. and four of 0.6 Gm. When he reported for his sixth treatment he asked to be excused as he had been feeling ill for two days. His complaint was sore throat, and general malaise. Examination showed mouth and throat red and patient complained of pain upon swallowing. A darkfield of a smear from the throat was made and a diagnosis of Vincent's angina arrived at. Local treatment was applied and intravenous injections administered. In twenty-four hours the patient's throat symptoms were relieved and in five days he said he was free from any symptoms and his antisyphilitic treatment was resumed without any further signs of the Vincent's angina.

Conclusions

The case reported by Dr. Sutton, of Hollywood, Calif., will leave no doubt of syphilitic infection and of the patient's being under active arsenical treatment and developing an infection of Vincent's angina. In case 1, a darkfield was not made, but clinical evidence was sufficient, to my mind, to advise antisyphilitic treatment with arsenicals, which relieved the symptoms within twenty-four hours. Six weeks later, while under the same treatment, the patient again developed a sore throat and at that time a darkfield showed him to be suffering from Vincent's angina. I am satisfied that this later diagnosis was correct, and I am also satisfied that my clinical diagnosis of syphilis was correct. I am sure that the case should be followed up further and every means be used to prove or disprove a syphilitic infection, for the future welfare of the patient. We are apt, at times, to lose sight of the fact that a patient can have one, two or more infections of different character at the same time. Case 2 is reported to give various angles of the possibility of Vincent's angina following active antisyphilitic treatment with arsenicals.

Case 3 corresponds closely with Dr. Sutton's case who, while under active arsenical treatment, developed an infection of Vincent's angina which cleared up by local treatment. Antisyphilitic treatment was continued during his infection with the fusiform bacilli of Vincent's angina.

I would be pleased to hear from others who have had similar experiences with patients developing infections of Vincent's angina while under arsenical treatment.

TUBERCULOSIS MAXIMS

Health is wealth.
A bathtub is not a finger bowl.
Tuberculosis is no game for pikers.
Sleep with the windows open and the mouth closed.
Never put off until tomorrow the milk you should drink today.
Physical rest exerts its fullest effect only with the mind at ease.
A good complexion cream is cream on the inside and sunlight on the outside.
Tuberculosis is like a house on fire; it can be put out only when discovered early.

—*North Carolina Health Bulletin.*

Surgical Seminar

Conducted by GUSTAVUS M. BLECH, M.D.

Surgical Exercise No. 4 (1924)

Recapitulation. The following surgical exercise was submitted for discussion in the December, 1924, issue:

A young man has suffered from sore throat for the past few days, and gargles prescribed by his physician proved ineffective. There was dysphagia. Physical examination reveals no evidence of throat infection. There is, however, edema on the left side of the throat and a deep-seated retropharyngeal abscess is suspected. The requirement calls for the best form or method of treatment, for a discussion of the dangers of ambulatory treatment, and for the precautions to be taken against danger.

Discussion

Dr. Emil C. Junger, Soldier, Iowa, insists on absolute bodily and mental rest, as one of the conditions needed to prevent the occurrence of embolism. Cold applications are indicated experimentally if they afford the desired relief. If this be not obtained, hot applications are to be tried.

When the edema or other evidence of suppuration has progressed sufficiently to call for evacuation, preliminary aspiration, to be followed by incision and evacuation of the pus is the rational treatment.

The extension of the edema to involve the glottis and larynx is a serious complication, which must be met at a moment's notice by the performance of tracheotomy.

Dr. Edmund D. Levisohn, Chicago, Ill., considers the exercise a perplexing one, which confronts many physicians in their daily practice, because the dysphagia demands immediate relief.

What is the best method of treatment? There can be but one answer to that—prompt surgery.

An incision along the border of the sternocleidomastoid muscle, with careful, blunt dissection of the underlying important structures until the suppurative process is reached, the insertion of a drain, a few sutures and copious wet dressings are the principal steps to be followed.

Extensive edema of the pharynx may call for a few superficial incisions of the mucosa to permit the escape of serum. Gargles or topical applications of astringents are of minor importance.

Many practitioners, undoubtedly, prefer to open these abscesses through the pharyngeal route; but, if the abscess is sufficiently large to produce edema, there is danger of sudden asphyxia from the release of pus, to say nothing of the more remote danger of a septic bronchopneumonia.

As regards the danger of ambulatory treatment, we immediately think of edema of the glottis and asphyxia. Extension of the abscess downward is a complication brought about by irrational treatment, with serious results.

The precautions to be taken suggest themselves from the pathology. Strict confinement in bed in a hospital where tracheotomy can be performed at a momen's notice will prevent avoidable accidents.

Dr. William G. Symon, of Garrett, Indiana, introduces himself to the Seminar family as one, who, for some time past, has carefully read every problem that was presented, has solved it and awaited the discussions by the others until the present exercise constrained him to submit his opinion, which is as follows:

Taking up the requirements in the order given, I would say that, there is only one method of therapeutic intervention indicated, namely, surgical evacuation of the abscess. This should be done as soon as the diagnosis has been made and consent from the patient and his family obtained.

The abscess should be opened, preferably with a pair of scissors, directed against the apex of the swollen area, plunged through the mucosa and muscle. When the abscess has been reached, the scissor blades should be opened and withdrawn while held open so as to produce a vertical slit in the pharynx.

Great care should be taken to turn the patient's head to the side and down, to prevent aspiration of the pus.

Ambulatory treatment is exceedingly dangerous, because gravity favors an exten-

sion of the abscess downward, while it may also spread laterally and erode the internal carotic artery. Accordingly, rest in bed is a *sine qua non.*

To guard against danger, the patient must remain under observation in the recumbent posture. Do not lose sight of the emergency character of the case. Even after successful evacuation of the pus, the patient must be closely watched, as these abscesses have a tendency to refill, followed by a sudden escape of pus into the trachea.

It is only by prolonged and effective drainage through maintenance of an uninterrupted flow of pus, that extension and involvement of important blood vessels and vertebrae can be averted.

At the same time, measures to improve the patient's general condition should not be neglected.

Editorial Comment

The fact that only one of the regular contributors was heard from on this exercise, that a comparatively few sent in discussions, and some treated the problem as one too elementary to merit serious consideration, was rather discouraging.

In my desire to present variety, I searched the recesses of my memory for some instructive experience and conjured up the following scene.

A number of years ago, I was in a small hospital and had just completed an abdominal operation. Just as I was putting on my collar, a nurse ran into the dressing-room and exclaimed: "For God's sake, Dr. Blech, come quick!" Thinking that it concerned my patient, I followed the nurse to a floor below into a private room and there I saw a young doctor standing pale and trembling and a young man lying on the floor—dead.

The situation was not clear to me just then, though I divined that death had come suddenly and I began heart massage and artificial respiration, all to no avail. While all this went on, I learned the facts. The young doctor had treated the patient for sore throat. He suspected a "peritonsillar abscess," and tried antiseptic gargles for a day or two and prescribed calomel internally. While I was in the operating room, he had called, and in the belief that by a stab puncture of the pharynx he could evacuate the pus without much ado, he depressed the patient's tongue and pressed the point of a narrow bistoury against the most prominent place in the pharynx.

Scarcely had he punctured the mucosa when the patient jumped out of bed, hopped about with signs of great air hunger and, ere the physician realized what it was all about, he fell dead.

Gentlemen, I have drawn the picture just as it happened. There was a coroner's inquiry and, while no criminality was attached to the physician, my diagnosis of retropharyngeal abscess was confirmed.

And now to my mind comes the most humilating thing that can come to any physician. The deputy coroner who had conducted the hearing, stepped up to the doctor, laid a hand pityingly on his shoulder and said: "You are all right, doctor, but had you cut deeper you would have struck the abscess, and had you used the knife to open the man's windpipe, he would have lived."

That experience led me to publish it as an exercise.

I also want to say that I went over several popular books on surgery and I note that this subject is not treated at all, or indirectly only, as a problem coming within the province of throat surgeons.

Of course, I agree with one eminent surgeon-author that throat specialists can do certain throat operations better than the general surgeon, and I, for one, no longer perform tonsillectomies or similar operations, but I would NOT refer a retropharyngeal abscess to a specialist, because I feel it belongs to the province of the general surgeon, and he should master the diagnosis and treatment.

What applies to the general surgeon applies, with still greater emphasis, to the country practitioner, who often must be a specialist in all specialties.

As for the technical discussion, I am sure there is no need for comment on my part. Dr. Junger, Dr. Levisohn and Dr. Symon have ably presented the replies to the requirements. Dr. Symon is cordially invited to become a "regular" contributor, for he shows plainly ability to handle surgical problems.

Surgical Problem No. 2 (Series 1925). Presented by Dr. Fred L. Holcomb, Coldwater, Kans.

You are called to see a farmer's wife, aged 41, whose principal symptoms are rise of temperature (104° F.), fast pulse, aching all over the body and intense headache.

After three or four days, all symptoms disappeared except the intense headache. Measurement of the body temperature shows it to be subnormal.

Physical examination shows a badly coated tongue with *fetor ex ore*, anorexia, icterus, poor circulation and general prostration.

These phenomena led another physician to make the diagnosis of intestinal influenza or typhoid fever, in which I did not concur.

Three weeks after the first consultation, the patient left town, still suffering from intense headache and showing subnormal temperature.

This patient was again seen by me about a month later. For four days she suffered from intense headache, some nausea and vomiting, and costiveness. The thermometer again registered subnormal. Pneumonia was suggested by the attending physician, but I ruled this out because of the absence of fever and objective phenomena of lung involvement.

On the sixth day after the second consultation, her temperature rose to 100° F. and continued to rise until it reached 108.5° F (axilla) the next afternoon, one hour preceding the patient's death.

Her mentality, which had been slow from the very beginning of her illness, manifesting itself in inability to think logically, remained so until she became unconscious preceding death. There never was any delirium.

Of her past history I obtained the following data. She had the usual diseases of childhood and remained strong and well until after her marriage. She had five children, an average of two years between each. Six years ago I operated on her for appendicitis; three years ago she underwent a hysterectomy and unilateral oophorectomy and salpingectomy, after which she was fairly well until the last illness.

Requirement: In spite of the somewhat fragmentary data, give your diagnosis and reasons.

SURGICAL TREATMENT OF ANGINA PECTORIS

Attacks of angina pectoris are so agonizing to the patient and so terrifying to his friends that any method which offers a probability of relief is worthy of consideration.

Drs. Philip K. Brown and Walter B. Coffey, of San Francisco, have contributed a very scholarly article on the above subject to the October number of *Archives of Internal Medicine*, in which they report 16 cases treated by their method, with 2 deaths and 14 patients relieved of their most distressing symptoms.

The operation is based on the hypothesis that the fearful substernal pain in angina is due largely to spasm of the aorta, and, possibly, also of the coronaries, which are innervated by the cervical sympathetic.

The operation consists in cutting the left superior cardiac branch and the main trunk of the cervical sympathetic, below the ganglion, with occasional removal of the ganglion. For complete relief it may sometimes be necessary to perform the operation on both sides. It has been done under a local anesthetic.

HENOCH'S PURPURA

While purpura is a condition not very frequently encountered, and is, by some, considered a symptom, rather than a disease, the condition described by Henoch, in 1874, is held, by many, to be a definite entity, and is of interest chiefly from the fact that, in children, it is sometimes mistaken for an acute surgical condition in the belly.

John Gracie, M.B., writes interestingly of this condition in *The Practitioner* (London), for December, 1924.

The characteristic symptoms are:

1. Acute, severe, abdominal pain, of a colicky character, frequently with vomiting, diarrhea and bloody stools.
2. Painful swellings of one or more joints.
3. A hemorrhagic rash, usually symmetrical and near some joints, though not necessarily the swollen ones.
4. Hematuria and albuminuria.
5. Occasional cases show epileptiform convulsions.
6. Little or no fever, unless acute nephritis develops.

This condition should be kept in mind when diagnosing acute abdominal conditions in children.

Clinical Notes and Practical Suggestions

Income Tax Information

By M. L. SEIDMAN, C.P.A., New York

IN THE previous article, the normal tax and the surtax were explained. In this article, the earned income will be discussed, and the question of capital gains and losses.

Earned Income

The provision giving special consideration to earned income appears this year, for the first time, in our income tax laws. Its name makes its purpose self-explanatory. It seeks to impose a smaller tax on income derived from the sweat of the brow than on income derived from clipping coupons.

The law defines earned income as the income derived from personal services rendered. It, therefore, includes wages, salaries, professional fees, etc. The man who is engaged in business can, on this account, consider as his earned income a reasonable allowance for salary. However, this amount cannot exceed 20 percent of his share of the profits of the business. The law says that in no case can the amount of earned income be regarded as more than $10,000. But, this does not mean that a person is not allowed a larger salary than $10,000. It only means that, for the purpose of computing the earned income credit, not more than $10,000 can be considered as earned income. On the other hand, the law also says that everyone has the right to consider at least $5,000 of his income as earned income, whether or not it is, in fact, earned. In other words, if the income of an individual were $10,000, and all of it came from interest on bonds, or profits on stocks, while there would be no earned income in fact, that individual would be able to compute his tax as if $5,000 of his income were earned income.

The law provides that the total tax shall be credited with 25 percent of the tax that would be payable if the earned income were all the income.

An actual case will perhaps serve to clarify the principle. Let us assume that a married man with no dependents has a net income for the year 1924 of $10,000, of which $6,500 is from salaries, and $3,500 from profits on stocks. In other words, his earned income is $6,500, and his total income $10,000. The tax would be computed in the regular way, on his total income. His total income being $10,000, he would deduct his exemption of $2.500, leaving $7,500 subject to tax. The normal tax would be 2 percent on the first $4,000, or $80; and 4 percent on the remaining $3,500, or $140, making a total normal tax of $220. Since his total income was only $10,000, there would be no surtaxes, so that his total tax would be $220 before the credit for the earned income.

Recompute the tax on the assumption that the earned income is his only income. In other words, assume that the $6,500 earned income constituted all the net income of the taxpayer and compute the tax on that basis. We therefore start with $6,500; deducting the exemption of $2,500 which leaves $4,000 subject to tax. This is all taxable at 2 percent, or $80. We thus see that, if the earned income were the entire income of the taxpayer, his tax would be $80. Now, the earned income credit can be taken. This is 25 percent of this $80, or $20. We now go back to the tax that was first computed in the ordinary way, of $220, deduct from it the earned income credit of $20, which leaves the net tax to be paid of $200.

There is a further limitation that might be pointed out, and that is that in no event can the earned income credit exceed 25 percent of the tax computed in the ordinary manner. This limitation, most commonly, applies in those cases where the entire net income is less than $5,000. In such cases, the simplest way of computing the tax is to first compute it in the ordinary manner, and then deduct one-quarter of the tax so

arrived at, for the earned income credit, the difference representing the net tax payable by the taxpayer.

It is obvious that, from its nature and purpose, the earned income provision is only applicable to individuals, for it has as its background the element of personal services. Corporations, therefore, cannot take any allowance for an earned income credit.

Capital Gains and Losses

The theory of the capital gains tax is to afford relief to individuals who realize, in one year, profits that have accrued over a number of years. At the same time, the new law limits the reduction in the tax on account of losses sustained in one year, but that have accrued over a number of years.

A capital asset is defined as property held for more than two years, except stock in trade. Under the present law all property, whether or not connected with a business, and whether or not held for profit, is a capital asset if it is held for more than two years.

Now let us see how a capital gain or a capital loss affects the tax. First as to capital gains. To begin with, it is necessary to get the capital *net* gain, that is, the excess of the capital gains over the capital losses. Thus, if A, in 1924, sold stock for $200,000 that he bought in 1914 for $100,000, his capital gain is $100,000. If, in 1924, he also sold for $10,000 bonds that were purchased in 1919 at a cost of $20,000, he would have a capital loss of $10,000. His capital net gain would, therefore, be the difference between $100,000 and $10,000 or $90,000.

The law says that capital gains shall be taxed at a rate of 12½ percent, irrespective of the amount of the other income. In the case supposed, therefore, if, in addition to the capital net gain of $90,000, the taxpayer has ordinary income of $60,000, his tax would be computed as follows: Assuming that he were a married man with no dependents and his earned income were $5,000, the normal and surtax would first be computed on the ordinary income of $60,000, which would amount to $8,677.50. To this would be added the capital gains tax of 12½ percent on the capital net gain of $90,000, or $11,250, making the total tax $19,927.50.

The relief that is afforded by this special treatment of the tax on the capital gains can best be shown by the fact that, if there were no such provision, the normal and surtax on $150,000, that is, $60,000 ordinary income and $90,000 capital net gain, would be $44,117.50, so that, in the case supposed, the capital gains provision saves the taxpayer $24,190.50.

It is very important to note, however, that it is entirely optional with the taxpayer as to whether he wants to come under the capital gains provision. Naturally, if it works to his benefit, he should take advantage of it and, if it does not work to his benefit, he should not elect to be taxed under it. Because of the many possibilities and variations, an absolute rule cannot be laid down giving the point where it is no longer advantageous to come under the capital gains section, or vice versa. This much, however, can be said with exactness —where the income including capital gains is less than $23,000, it is best not to report on a capital gains basis, and where the total income exceeds $23,000, it is best to report on a capital gains basis.

Another phase of the capital gains tax is reflected in a case where the taxpayer is confronted with a situation somewhat as follows: Net profits on stocks (capital net gain), $100,000; salary, $25,000; bad debts, interest, taxes, etc., $35,000. In other words, not considering the capital gain, there is a gross income of $25,000 and deductions of $35,000, or an excess of deductions of $10,000. For the purpose of computing the capital gain tax, this excess of $10,000 can be deducted from the $100,000 of capital gains, so that the capital gains tax would be computed on $90,000, and therefore amount to $11,250.

It is interesting to note that in such a situation the taxpayer would not get the benefit of his exemption because the exemption is a credit allowed solely for the purpose of computing the normal tax, and obviously in the case given there is no normal tax, but only a capital gains tax, and the exemptions play no part at all in the computation of the capital gains tax.

To illustrate capital net loss principle, let us assume that A, a married man with no dependents, has an income from rentals, interest and dividends, of $100,000, and that he has sustained a net loss in the amount of $20,000 on the sale of stocks held for more than two years. Assuming that his earned income was $5,000, his tax would be arrived at by first computing the tax on the ordinary income of $100,000, which will be found to be $22,617.50. From this amount is deducted 12½ percent, or one-eighth of

the amount of the capital net loss. As the capital net loss was $20,000, the deduction would be $2,500. The net tax would therefore be $20,117.50.

Another noteworthy feature is that whereas it is optional with the taxpayer whether, or not, he will compute his tax on the basis of the capital gains provision, there is no such option in the case of capital losses. The tax must be computed in the manner illustrated, with but one exception, and that is where the tax on such basis would be smaller than the tax computed without regard to the capital loss provision.

In order to determine when the tax on the capital loss basis is smaller than the tax computed on the ordinary basis, it is best to work the tax out on both bases and compare the results. As a general rule, however, it will be found that wherever the ordinary income, not considering the capital loss, is less than $24,000, the tax computed on the basis of the capital loss provision will be less than without it, and should therefore be disregarded.

Income Tax Blanks

The federal income tax blanks for 1924 returns have just been released, and a word might be in order, at this time, to explain their use.

Individuals must make their returns on one of three forms, depending upon the particular status of the individual. Salaried individuals and wage-earners, whose earned net incomes do not exceed $5,000, should make their returns on Form 1040A. Individuals whose net incomes are more than $5,000, or whose net incomes, regardless of amount, are chiefly derived from sources other than salaries and wages, such as from a business or a profession, must take their returns on Form 1040. Form 1040FY is a new form and is to be used by all individuals who report on a fiscal year basis, or whose income is derived from a partnership or trust that reports on a fiscal year basis. Partnerships must make their returns on Form 1065. Corporations should file their returns on Form 1120. Fiduciaries, that is, executors, trustees, etc., should use Form 1041.

Before a taxpayer attempts to fill in any of the blanks, he ought to make sure to carefully read and study the instructions accompanying them, as they will help considerably in properly preparing the returns.

Questions and Answers

Q. My business cleared above all expenses last year $5,800 and I would like you to give me some information as to the amount of income tax I must pay. I am a married man with one child. Is there any allowance for depreciation on frame building and machinery?—B. W.

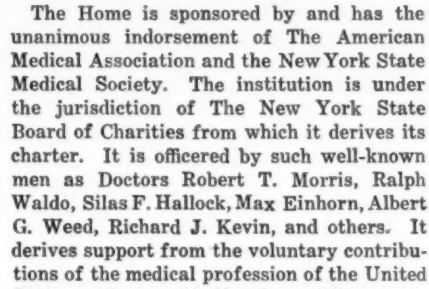
A. Your tax will be $47.50, computed as follows: Your exemption is $2,900, which leaves $2,900 to be taxed at 2 percent, or $58.00. Your earned income credit based on an earned income of $5,000 is $10.50, making the net tax $47.50. You are entitled to an allowance for depreciation on the frame building and machinery, assuming that the building is not used for residence purposes.

Q. I contribute $200 to a joint fund for the support of my grandparents. Can I claim exemption from tax payment on this amount?—J. H. P.

A. If the amount you contribute is more than one-half the sum necessary for the support of your grandparents, you are entitled to claim the exemption for them; otherwise, you cannot make any claim.

THE PHYSICIANS' HOME
THE FIRST MEDICAL HEARTHSTONE OF AMERICA

The Physicians' Home, Inc., is an institution, national in scope, which cares for the old and infirm members of the medical profession of any recognized school of medicine of any State. Their wives and widows are also accepted as guests and everything possible is done to preserve the "home" atmosphere.



The Physicians' Home, Caneadea, N. Y.

The Home is sponsored by and has the unanimous indorsement of The American Medical Association and the New York State Medical Society. The institution is under the jurisdiction of The New York State Board of Charities from which it derives its charter. It is officered by such well-known men as Doctors Robert T. Morris, Ralph Waldo, Silas F. Hallock, Max Einhorn, Albert G. Weed, Richard J. Kevin, and others. It derives support from the voluntary contributions of the medical profession of the United States and many kindly disposed laymen.

As the movement grows, it is intended to locate Homes, as separate units, in various parts of the country; one, now operating in the East; one West and one South. There is offered at present a suitable property in Florida and another in California, which can be acquired as soon as sufficient funds are available for their adaptation. The first unit is located in Caneadea, N. Y., near the banks of the Genesee, a river noted for its scenic beauty, and consists of a fertile farm of 186 acres, the gift of Dr. Stephen V. Mountain of Olean, N. Y., as a memorial to his father. There are well filled barns and silos, which provide feed for a dairy of 35 Holstein cattle and for 200 pure bred fowls. Pure water is piped directly from mountain springs. The house is a commodious structure of twenty-eight rooms, modern in every particular, having its own electric light plant, steam heating system, modern plumbing and fixtures on all floors. It is well and comfortably furnished and has two assembly rooms, in which are provided a piano, victrolas, and a Grebe radio for the entertainment of its guests.

Lawn Party at The Physicians' Home.

The physical welfare of its guests is met by an altitude of 1800 ft., large warm well-ventilated bedrooms, with running hot and cold water, two large sunny drawing rooms, four baths, a long veranda, and good food. The Home maintains a medical clinic under the supervision of a competent physician.

One who expects to find the usual "institutional" atmosphere, with rules and regulations, restrictions and the like, will be agreeably disappointed. Instead, he will find a well-regulated, contented family of intellectual men and women, whose only restrictions are a self-imposed regard for the comfort of each other, shown in a spirit of helpfulness that amounts almost to rivalry.

If space permitted, it would be interesting to relate how these people find interest and pleasure in life at the Home. Briefly—Dr. M., totally blind, has learned to make beautifully woven Indian baskets, which find ready sale to visitors; Dr. K., takes delight in the production of pure-bred fowls; Dr. Sarah J., supervises the propagation of shrubs and flowers on the spacious grounds of the Home; Dr. A., formerly a professor in one of our best colleges, who, no doubt, has taught some of you or your fathers, still busies himself with the collection of botanical specimens; another gives his time as a radio expert; some like to fish and hunt. Upon a rainy afternoon, they can sit in the Library and do more laparotomies and oophorectomies in an hour than most hospitals can in a week.

Dr. M. (blind) weaving baskets.

Please know that those who come to the Home are not inmates of an institution, they are guests of the medical profession and none who have made application so far have been failures in practice because of inefficiency.

There is no idea of discrimination on grounds of religion or of medical creed at the Home. The only requirement is that the guest has been in good standing in the profession, and if the reader knows of any such faithful physician in distress, you will confer upon him a favor by sending the facts in the case to Dr. Silas F. Hallock, 901 Lexington Ave., New York City, Secretary of the Central Board. He has a big heart and likes to receive your letters.

The Home is now investigating many worthy applications, and it is intended to erect an additional dormitory as soon as funds will permit. Many of these men find themselves destitute or infirm after years of unselfish, unremunerative public service. The average professional income is less than $1000 per year. Recently, we made a canvas of ten almshouses in the State of New York and found three old doctors. If that ratio holds good, there are twenty-five physicians in the almshouses of the State of New York. One was reported to us as being 95 years of age, good morals and mentality and as

having practiced 67 years. Think of that! Ninety-five years old and on the waiting list! How long must he wait? The answer is YOURS.

Many of these good men and women have lived long lives of service, self-sacrifice and benevolence. You can't take the old family doctor, the stout-hearted old surgeon, the palsied professor and throw him into the discard—or the almhouse. NO! NO! Perhaps the most pitiful life-picture is the man of great age, who has outlived his friends and relatives, with no one who cares.

It will be evident from what has been said, that the Physician's Home has been a successful project up to and within the means thus far available. It will also be obvious to you that much remains to be accomplished to allow the work to go on to its full fruition. We must not fail, we must progress. The duty is yours as well as ours. The need is urgent; pitifully urgent! Any person is eligible to a Contributing Membership, which costs but $10.00 per year. One hundred dollars constitutes a Sustaining Membership, paid but once. Many will heed the call from a motive of philanthropy. Others will not be unmindful of the possible protection vouchsafed their wives, their widows, or themselves, when regarded in the light of insurance against a possible reverse turn of the wheel of fortune.

A game of "66."

The prevalent idea is that physicians have money enough, funds enough and relatives enough to care for them when the cloudy days come. This is true as a rule but exceptions to the rule make particular appeal to those of us who know about the doctor and his work in a profession in which there are now about 140,000 members. The exceptions, which include worthy doctors in distress, are about equal in number to those which include worthy doctors who have made just the right sort of investment all along in their financial affairs and these amount to a considerable number when placed in a row.

Please stop a minute, Doctor, and think this over. For if every physician in this country were to know what the officers of The Physician's Home know, the institution would promptly have their support for units of the Home in different parts of our United States. They would not only all become members right now, but they would also ask grateful patients to become members.

When good fellows get together.

We ask you to do two things; assist your County Society to complete a successful organization for the support of the Home and send your check for as generous an amount as your heart, conscience and ability may dictate.

It is requested that physicians remember this practical and altruistic charity in their testamentary devices. Also suggest it to your friends and patients. The legal designation of the corporation is The Physicians' Home, Incorporated.

—

[There is probably no class of men (except, perhaps, our well-known millionaires) to whom more appeals for help are made than are made to the physicians of this country; and it is highly probable that no class contributes so largely, in proportion to their financial ability, to the assistance of those in distress than they, to say nothing of the valuable professional services which they render gratis to the needy, as a matter of course.

Here seems to be an unusual opportunity to do something direct and more or less personal for the unfortunate members of the great professional family to which we all belong, and, perchance (though God forbid!) for ourselves.—ED.]

CLINICAL RESEARCH ON NEW DRUGS

The Abbott Laboratories, in its chemical and pharmaceutical research departments in Chicago and Philadelphia, is constantly

producing new remedies. Whenever possible, these are carefully tested on animals in our pharmacological department, but before offering them for sale to the medical profession it is essential that they should be tried out clinically by competent observers.

Among the readers of CLINICAL MEDICINE, I am sure there are some who will be glad to cooperate with us in this research work. To such we shall be glad to send supplies of new drugs, with data regarding composition, pharmacologic action, toxicity (if any), presumptive indications, etc. We shall ask our collaborators to give us accurate and complete reports of results obtained in every instance, together with suggestions regarding dosage, best forms for administration, and results obtained in every instance. Reports couched in general terms are without value.

These reports will not be printed without the consent of the writer, though we shall be glad to have the privilege of reproducing them when suitable.

Naturally, we shall be particularly glad to hear from physicians who have hospital facilities for this work, but reports from any careful physician will be appreciated and valued.

Please write me direct.

A. S. BURDICK,
President, Abbott Laboratories.
Chicago, Illinois.

INTRAVENOUS TREATMENT OF GONORRHEAL EPIDIDYMITIS

Within the last few years the treatment of gonorrheal epididymitis has undergone a marked change. Formerly a condition that was dreaded by both patient and physician, thanks to intravenous therapy, it is now approached with some degree of equanimity.

It is not believed that the old conservative method of treatment of this condition, consisting of rest in bed, free purgation, elevation of and hot and cold applications to affected parts, should be scrapped—rather it should be supplemented.

In 1915 Murata[1] reported that he had successfully treated gonorrheal epididymitis by the intravenous injection of a calcium salt solution.

In 1920 Stern and Ritter[2] noted the effect of the intravenous injection of sodium iodide in epididymitis of gonococcal origin.

Ravich[3] in 1922 reported excellent results in 160 cases in which sodium iodide was used.

Radnai[4] reported two cases which were favorably influenced by a few intravenous injections of 10 Cc. of a 10-percent solution

Wright[5] in a series of cases reported uniformly good results from the intravenous injection of a sterile, 20-Cc. solution containing 31 grains of sodium iodide. He repeated the injections every 48 hours until subsidence of symptoms. The number of injections in his cases varied from 4 to 8. He believes sodium iodide has a favorable effect on certain cases of impotence.

The number of cases in which I have either used or observed the use of sodium iodide treatment is admittedly few, but, considering the excellent results obtained and those referred to by the urologists quoted above, it has seemed worth while to report this small series.

The plan of management used in these cases is essentially as follows: The patient is placed in bed if possible, free catharsis instituted, affected parts elevated with jock strap or other suitable support, and, in bed patients, a hot water bag is placed over symphysis pubis. One Gram of sodium iodide in 10 Cc. sterile water is injected intravenously. This injection is repeated every 48 hours until pain, tenderness, and elevation of temperature are absent. In no case has it been necessary to administer over four injections. The solution is best given at room temperature and slowly.

All patients stood the treatment well and were much pleased with the results obtained. No reaction was noted in any case.

In two or three cases there was a drop in temperature from 102-103 to normal within 6 to 8 hours. In all cases there was a decrease in intensity of pain and tenderness within 24 hours after the first injection. This diminution in pain and tenderness was progressive, being noted after each injection. Usually all pain and tenderness were entirely absent after the third injection.

The swelling of the epididymis was favorably affected in all cases. In some cases all evidence of swelling and induration was entirely absent within one week after institution of treatment.

The method of action of sodium iodide in these cases is but little understood, but that its action is most favorable can not be gainsaid. It has been claimed that any foreign protein substance, such as sterile milk, for instance, would give equally good

results. However, as far as the writer has been able to ascertain, no one has supported this contention with clinical results.

As all induration about the epididymis is frequently absorbed when the sodium iodide method of treatment is followed, it is believed that its wide use will cause a lowering of the percentage of sterility following bilateral epididymitis. Complete results along this line will be reported in a later paper.

Conclusions

1.—Sodium iodide intravenously acts most favorably in all cases of gonococcal epididymitis.

2.—Treatment is easily administered and apparently free from danger.

3.—There is reason to believe that widespread adoption of this treatment will result in a most gratifying reduction in cases of sterility.

References

[1]Murata, V.: Abstract *J. A. M. A.*, Dec. 4, 1915.
[2]Stern, Maximilian, and Ritter, I.: Sidney, N. Y., *Medical Record*, January 31, 1920.
[3]Ravich, Abraham: *N. Y. Med. Jour. and Med. Record*, May 3, 1922.
[4]Radnai: Abstract *J. A. M. A.*, Jan. 20, 1923.
[5]Wright, L. T.: *N. Y. Med. Jour. and Med. Record*, Sept. 5, 1923.

A. J. CHENERY, Lieutenant,
Med. Corps, U. S. Navy.

Reprinted from *United States Naval Medical Bulletin*, Oct. 1924.

DR. BRYCE'S TALKS

The Rise and Fall of Certain Medical Fads

When I review my experience, from the time I entered the profession to the present, and note the adoption of remedies and methods, their apparent sucessful use, their gradual loss of recognition and final passing from the stage to be followed by others, and these to go the same way, I begin to ask myself whether many of our substitutes for the old things may not be simply a change of fashion. I think we can overdo some very good things when we forget what nature often can do without our help.

It would seem that the fear of infection has become so widespread that we have forgotten the fact that many agents that will destroy bacteria will cripple the action of our reparative cells when brought into contact with them. We must take into account the germicidal power of healthy blood. I do not wish to discount the value of iodine or any other antiseptic when indicated and properly used, but to discourage its abuse.

When I commenced practice, carbolic acid was then just claiming attention as an antiseptic and for years it was lavishly used as a surgical dressing and antiseptic. All wounds, surgical and accidental, were kept moist with strong solutions of this popular agent, until its unguarded use furnished abundant evidence that it was potent for harm as well as for good, and then we drifted back to safer and weaker strengths and used it less frequently. Then came another claimant, in iodoform, which almost entirely supplanted carbolic acid and had its day and now has given place to iodine, which I believe, from long observation, is sometimes more harmful than helpful in recent injuries.

Not only do we get in the habit of prescribing certain remedies or imaginary specifics, but every now and then certain diseases become fashionable and unusually prevalent and incorrigible.

Just as the old time mush poultice, blister plaster, soapsuds clyster and lobelia puke have gone out of fashion, so, a little later on, the profession of "Cupper and Leecher," very popular as an adjunct to the regular profession, has become a memory of the past.

The old-time doctors bled almost every acute case that they met, and as the clinical thermometer was not known then, their guide as to the intensity of fever was a bounding pulse, a red face and a hot skin. As these conditions are found in almost all acute troubles, bloodshed was rife in the land.

In those days cupping was much in vogue and frequently supplanted and substituted venesection. It was spoken of as dry cupping and wet cupping, and really served a good purpose in many affections. They had special glasses for the purpose but any goblet, tumbler or drinking glass could be used and was usually what the laity used. The purpose of the dry cup was to do in a quick manner what the counterirritant did in much longer time, viz.: relieve local congestions by drawing the blood to the surface. This was accomplished by heating the inside of the cup and putting it on the surface to cool off and draw. I did this by saturating a bit of paper with spirits of turpentine, dropping it in the cup lighted and applying it to the patient. The absence of air would soon put the fire out and the cup would stick and draw like the intake of a Ford cylinder. I had grown so proficient at cupping that I thought I could secure a firm hold anywhere on the human hide with a strong pulling cup; but you never can tell.

One day I was called to see a very prominent lady suffering from a pain over her left side and I undertook to give her a dry cupping over the seat of the pain. She was a very fastidious and spoiled woman and made a perfect fool of herself in pretending to be too modest to show me enough of her precious body to place a cup on. Finally she uncovered enough for me to attempt to place a cup, and in my eagerness to finish the job I let my burning turpentine paper scrap slip out of the tumbler and fall right down on the bare skin of the patient. In my trepidation I tried to slap the fire out with my naked hand and gave her a powerful spank that instantly extinguished the fire but raised her ire to the bursting point. She gave one wild, unearthly scream as soon as she got her breath and then went into as pretty a hysterical sobbing spell as I ever witnessed. There was nothing I could say or do to stop her, so I left her in the hands of her sister and went to her husband's store and told him the whole story with my regrets at the unfortunate incident.

He was a reasonable man, and said: "After this experience I doubt my ability to reinstate you in my wife's confidence."

"I don't want you to try," I told him.

C. A. BRYCE.

Richmond, Va.

PARAPHIMOSIS CURED BY COLD AFFUSION

[Dr. R. Stewart MacArthur, of Los Angeles, sends in the following extremely interesting and practical sugestion, which he discovered in a copy of *The Lancet* (London) for Aug. 12, 1843.—ED.]

"In 1834 a French soldier was received into the hospital at Nismes for paraphimosis consequent on a blennorrhea of the most intense kind, and which had lasted for a fortnight. Previously to the man's reception, the regimental surgeon had attempted the reduction of the evil by scarifications, etc., without success, and other ordinary means were adopted by the hospital surgeons to as little purpose. The glans penis was swollen, dark-colored, and acutely painful. The application of cold was now thought of, and made in the following manner: The patient was seated in a chair, and the operator in front of him raising the organ affected between his thumb and forefinger. A stream of cold water was now let fall from the height of about a yard upon the glans, which in a few minutes began to lose its high color, and diminish perceptibly in size; and in five or six minutes from the commencement of the process, the organ was so much smaller that reduction became easy. Since the period named (says the *Journ. de Conn. Med. Chir.*) the surgeons of the Nismes hospital have always had recourse to the douche, as above, in cases of paraphimosis, where reduction was unattainable without incision, and in such cases cold affusion applied as above has always proved efficacious."

AN OLD-TIME DOCTOR

In a copy of CLINICAL MEDICINE which came into my hands by chance, and which I have read with much interest as a layman, I notice that you are preparing an article on the old-time doctor.

My father was an old-time, country doctor and my earliest recollections of him are inseparably associated with his saddle-bags and the horse which carried him over a wide range of rather wild territory. When he had a little time at home, we children used to tease him to tell us of his experiences, and would sit spell-bound as long as he would talk of his adventures, especially those occurring at night, which never failed to grip the imagination of a youngster.

The most awesome moments of my childhood were those during which I stood by, at a respectful distance, to see my father open up the smelly old saddle-bags, select a pair of forceps and pull an aching tooth for a suffering negro; to flinch, as he lanced a "bile" for some neighbor, or measured out "physics" for an ailing country wife or for a puny baby.

Going back over my recollections of him and of his older brother—both country doctors—my respect for the memory of those old-timers grows. My father finally evolved into a small city doctor, but he remained a slave to suffering humanity—a healer of the sick and never a business doctor. He lived comfortably, but died poor in the world's goods.

But the riches he had stored up were revealed when he was laid to rest, attended by a tremendous gathering of people from all walks of life, who were genuinely grief-stricken. They came from distant places, or wired or wrote—some of them pitiful scrawls, but sincere—all people whose lives had been touched in one way or another by

his unfailing devotion to the ideals of the old-time country doctor.

I never knew him to make a charge on his books against a widow not in good circumstances, or against an orphan. I never knew him to refuse to get up at any hour of the bitterest night and ride or drive miles to attend some poor sufferer whom he knew could never pay him.

Yet who could say that he did not die rich? The memory of the tributes paid him is a heritage I now appreciate far more than I might have valued the money he could have made by being a business doctor.

As I come more and more in contact with and observe the business doctor, my respect for the old-timer grows. He did not have the skill and facilities of the modern doctor, perhaps, but he had sympathy and ideals. When he passed, he left something behind him more enduring than money.

A. T. ROBERTS.

Columbus, Ga.

[The grandfather of the Editor was an old-time country doctor, too, and many of Mr. Roberts' reminiscences strike responsive chords.

In these days of specialism and group clinics, there is danger that the old-time "family doctor" may be lost—a loss which the country and, especially, the communities and the families of our land can ill afford.

It was the "family doctor" who welcomed us into the world, and not a delivery-room nurse; he watched us grow up and sympathized with us in our mental and spiritual as well as our physical indispositions; he took the place of a father-confessor to those who had not the benefit of the Romish confessional; and when we took to bed for the last time, lo, he was there—not a hospital orderly or a "mortician"—to smooth our pillow and grasp the hands of our loved ones in loving sympathy; and when his time came to lay aside this world's cares, he was frequently impecunious, but who will suggest that he was *poor?*

Times have changed, and we have, of necessity, changed with them. In order for a doctor (or anyone else) to carry on his good work, he must first *be alive* to do it. Living was cheaper and easier in those old days than it is now, and if the modern physician must, perforce, introduce business methods in order to keep body and soul together, there is no reason why he should (and we truly believe that comparatively few of them do) let these crowd out the sympathetic and friendly interest and the spirit of helpfulness which characterized our professional forebears.

All honor to the general practitioner—the "family doctor"! We believe that the communities and the families he has helped and strengthened will refuse to give him up, and that a new day is even now dawning for him and that he will go on with his indispensable services in the *art* of medicine for generations to come, but reenforced and abetted by all the armamentarium of modern medical *science.*—ED.]

AN OLD POULTICE

The following is the formula of the "Cataplasma Pestelentiale," which was supposed, a hundred years ago, to be a panacea for the bubonic plague. It was supposed to soothe and stimulate.

Pigeon dung	8 parts
Saffron	1 part
Mithridaticum	2 parts
Thericia Londenensis	2 parts
Mustard seed	1 part
Venetian turpentine	1 part

RADIO, THEOSOPHY AND COMMUNION WITH SPIRITS

"I believe in theosophy; you consider it insane drivel. I, of course, believe I am right; you believe that you are right. I have a right to my belief, which I have reached after long study and investigation; you have a right to yours. But one thing you will have to admit, and that is that we theosophical believers are happier than you unbelievers. Isn't that so?" Mr. B. waited for an answer. I thought a moment.

"I think that's so," I admitted.

"You seem to have hesitated before making the admission. On this point all agree, no matter what they think of the truth of our teachings. What is the greatest catastrophe in your lives, the lives of unbelievers? The death of a child or a beloved relative or friend. Isn't that so?"

I admitted that that was so.

"Well, that greatest of all catastrophes in the lives of unbelievers is to us no catastrophe at all. To us there is no death. Death is merely a change to a higher, nobler and happier sphere; and the dead are with us; their spirits are close about us; we feel them and commune with them and are as convinced of their presence as I am sure that I am talking with you now. And our dead tell us not to grieve for them because

they are happier than they were here on earth."

"But shall we believe a falsehood merely because it makes us happy? For, to many people, your belief is not any more rational that the hallucinations of a disordered mind."

Mr. B. was not offended. Theosophists and other holders of fantastic beliefs cultivate a patient spirit. That's one thing in their favor. And he answered as follows:

"Whether or no we should hold beliefs 'merely' because they make us happy and help us to lead a finer, nobler and more satisfying life, is a question that has been discussed many times before. William James seems to think we should. Some people seem to think that whatever leads to our spiritual happiness—and there is no happiness except of the spirit—is true. But are you so very, very sure; are you yourself absolutely positive that existence after death and communion with spirits are insane hallucinations? Suppose that ten or twenty years ago I had told you that this smoking room in which we are sitting now is filled with millions and millions of voices, songs, speeches, sermons, curses, screeches, honkings of horns, miauings of cats, barking of dogs, neighing of horses, etc., etc.—in short if I told you that every noise and sound made anywhere on the earth is present and can be heard in this very room? Would you not have looked at me with pity as one hopelessly insane? And now you know it to be a fact. All you have to do is to install a radio receiving apparatus, and you can hear anything you want to. The sound made anywhere on the globe can be heard anywhere else and everywhere else on the globe, and at the same time, and undoubtedly on all other spheres and planets. All we need is sufficiently powerful broadcasting apparatus, and they will come."

The people who were playing cards at the table next to where we were sitting were a bit too hilarious, so we went out on deck and sat down in our chairs, and Mr. B. continued:

"We are now on the Pacific, midway between Honolulu and San Francisco. Suppose I had told you only seven years ago, on your first trip to Hawaii, that sitting on this deck you could listen to the playing of a ukelele in the Moana Hotel in Honolulu and to the beating of a child's heart in San Francisco—would you not have thought: Poor Mr. B., such a nice man, and so helplessly insane; it is a good thing that he is not violent; and in ordinary matters of life he acts quite rationally?

"Don't be too sure about the insane hallucinations of those who believe not only in the possibility of communion with spirits, but of those who assert that they have communicated daily with their dear departed. It is hard for those, who have not had the experience, to believe, but they certainly should refrain from scoffing."

I was about to reply to Mr. B.'s argument, but then the dinner gong sounded, and as there is another sitting after ours, we have been requested to be prompt at our tables.

On going down to the dining room Mr. B. said: "The news has just come in about the nomination of Coolidge and Dawes in Cleveland. And every word, and the applause in the Convention Hall could be heard here while we were having our dinner. I should not be surprised if in ten years from now our thoughts will be audible and readable across a continent or an ocean, the same as our faces will be visible." Here we separated to go to our respective tables.—*The Medical Critic and Guide*, August, 1924.

OBSTETRICAL SUGGESTIONS

To the Editor of CLINICAL MEDICINE:

I was interested in the controversy on "pathological obstetrics." CLINICAL MEDICINE has always been a strong advocate of the application of plain common sense to the practice of medicine; and I have some further thoughts to offer on this obstetrical matter, in which the application of common sense is involved.

It seems to be the modern tendency, especially in the cities and among the fastidious and germophobic classes of patients, to exalt obstetrics to the status of an esoteric ritual.

To my mind, the purpose of asepsis in obstetrics is to keep the mother, and the baby's umbilicus, from becoming infected; not as a ceremonial to celebrate the occasion. This is accomplished, primarily, by *keeping your hands off things* as much as possible. Make as few vaginal examinations as possible; in the average case, two or three are the maximum that is necessary. Rectal examinations are all right, providing you do not scatter the rectal flora all over things when you are through. And, when you are putting your sterile-gloved hands into places where there is danger of infection, *concentrate your mind on what*

you are doing! If you go fiddling around absent-mindedly, it will probably be advisable to drape the entire room and all attendants in sterile sheets, so that you can touch anything you want in your absent-minded condition, and still not infect the case.

I have had opportunities to note the advice and care given to pregnant women by some of my friends who are doing obstetrics, and it is my privilege to disagree with them. I do not think it necessary to tiptoe about the house and speak in whispers during the last weeks of pregnancy, lest something terrible happen to the prospective mother. I do not think that she needs to be carried up and down stairs, or fed like a humming-bird, or a censorship kept on what is said before her. She will not blow up if she is touched, and most of us do not believe that the baby will be marked if she hears hubby pull a swear-word during an exasperated moment. Most of my practice is among women who do their own washing on the day before the baby is born, and who consider the pregnant condition a fairly normal one, and do not pay much attention to it. I am rated as a fairly careful observer, and I have yet to note any deleterious effects upon mother or baby, from living an ordinary every-day life before confinement; or any benefits derived from putting the mother in a glass case with a thermostat.

I do not think, in general, that it is fair to criticize another man's methods unless you know the details of the case, nevertheless, I have scant commendation for the obstetrician who permits most of his mothers to remain in labor for three or four days. Exceptions may be justifiable, of course, but I have talked to many of these mothers who spent from twenty-four to seventy-two hours on a bed of agony, bravely fighting on the doctor's conviction that "Nature must take its course," and I can't see it that way. If Nature must take its course, when you have locked twins or placenta prævia, where are you going to stop? Exactly where is the boundary line between letting Nature take its course, and the need of scientific intervention?

My theory is that I am not taking care of Nature, but of the mother and the baby, and I am willing to tie Nature into a bow-line knot, if I can make things any easier for the mother, and do so with safety and at reasonable expense. In the majority of cases in which the labor drags out for days, it is either because the contractions are not strong enough and there is more pain than power; or else because the pressure of the head is not directed against the cervical opening, but to a point of the uterine wall behind (or in front) of the cervix, and dilatation is not efficient, but slow and uneven. What is the objection to a whiff of nitrous oxide administered by the nurse, a manual dilatation of the cervix, and, possibly, a dose of pituitrin, after the track is clear? This is the place for the last word in super-ultra-asepsis. If this can save many hours of labor, and can be done safely (which depends on the fellow who does it), is it not worth while? The mothers think so.

MILES J. BREUER.

Lincoln, Nebr.

GENERAL PRACTICE UNDER DIFFICULTIES

Pictures is it you want? Pictures of the old-time doctor with his saddle bags and paraphernalia. Yes, I have no pictures. But, picture if you will, in your mind's eye, a doctor who was located for seventeen years in a mining camp at an altitude of 4400 feet, and surrounding camps as high as 7200. You will realize that the only means of transportation in winter was aboard snowshoes or skis.

Frequently I was called a distance of five to twenty miles, with the snow five to ten feet deep and skis the only animal to ride.

I recall once being called at two p. m. by phone, that a man was "shot up" by a delayed blast at a mine ten miles over the mountain.

Loading necessary equipment into an improvised pack sack, consisting of a gunny sack and adjusted shoulder straps, I started over the mountain. The first two miles and a half was a climb to an altitude of 7500 feet and snow was beginning to fall. It is needless to say that my trail in the snow was similar to that of the markings of the range of fever in a typhoid case of two or three weeks standing. The snow was heavy and it was necessary with every few steps to strike the skis with the pole to knock off the adhering snow, making it very laborious work.

After reaching the summit of the mountain the snow became somewhat lighter and dryer and while passing along a steep hillside, a snowslide of the two inches of new snow was started and I was at once

three and one half feet deep in hard packed snow, with my feet tied to my skis. By hard work with my snowshoe pole, I was able to dig myself out in about one-half hour. Needless to say I proceeded with my feet free.

About this time a dense fog came up and I was unable to distinguish anything farther than the length of my skis, unless it be a tree or something dark. The trail was entirely obliterated with the new snow; the only guide was the telephone line, and it was impossible to see from one pole to another and only by keeping the last pole in view and the direction of the wire, could I keep my route. At that season of the year, December, darkness came early and by four-thirty I was in darkness and did not dare leave the telephone line. As it did not follow grades, as did the road which was obliterated by the new snow, I was compelled to follow the line up hill and down. The "down" was agreeable, for by this time I was extremely tired. Finally, as I came around the point I saw the lights of the mill about a mile away.

Here was apparently a fine open run, along the line down the mountain, and I let my skis loose, when the first thing I knew I was in the air over a cliff and alighted, about 25 feet below, in the soft snow which caved in all over me. After digging myself out, I was no worse for the leap.

A few minutes later, at eight o'clock, six hours after starting, usually a two-hour trip, I found the boys getting ready to start out on a hunt for me. This is only one experience of the many similar trips I have made, sometimes starting late at night over the mountain and through dense timber. Except for the two or three months of delightful summer, it seemed as though that country was made of snow and then more snow.

Possibly I may again relate some experiences of nearly thirty-five years in this, one of the most beautiful and delightful sections of the West.

W. M. BROWN.

Council, Idaho.

—

[It is interesting to all of us to learn what splendid work some of our confreres have done, and are doing, under the most adverse physical conditions, and we are, therefore, glad to give space to a letter like the above.

What Doctor Burdick especially desired, as stated in his note on p. 801 of the November issue of CLINICAL MEDICINE, was *details*, with pictures, where obtainable, of the men who did the work and the *way they did it*, in the Middle West fifty or seventy-five years ago.

Will not those who have access to such material please send it in as promptly as possible?—ED.]

SCORPION STINGS

Here, in this section of Mexico (western Jalisco and eastern Nayarit), we have an abundance of stinging scorpions.

The symptoms resulting from the sting of one of these insects are as follows: In one or two minutes the patient complains of numb, tingling sensations in the limb or part stung; from ten minutes to half an hour later he will begin to slobber like a rabid dog and also complain of choking. In one case which died as the result of the sting, death was due to paralysis of the respiratory center.

History: Child (native), male, eighteen months of age. Stung about 10 a. m. I was called two hours after the sting. Temperature was not taken; pulse uncountable; respiration, gasping. A dose of adrenalin was given by hypo, but the child died in about fifteen minutes.

In the other cases which I have treated, I have used adrenalin and "Calmative for children" (Abbott) with satisfactory results. Twice I have had to use H-M-C No. 1 for convulsions.

I have noticed that the patient will complain of numbness in the affected part for days after the sting. A peculiar circumstance is that never have I been able to note even a small wheal at the site of the sting; not even on the tenderest skin will there be any mark.

On several cases I have used the southern negro's remedy for snake bite—coal oil or petroleum—as a matter of experiment and, if used at once, there is no effect whatever from the sting. Stronger ammonia, strange to say, has no effect on the poison.

I. P. ISRAEL.

La Quemada, Jal.

—

[There are enough scorpions in the southern and southwestern states to make this note of interest to our readers in those localities.

This is the first authenticated record we have seen of a fatality due to the sting of a scorpion.—ED.]

The Leisure Hour

Conducted by GEORGE H. CANDLER, M.D.

What You See Depends on How You Look

IF YOU have ever, from dorsal decubitus —or even the latero-prone position— looked up at the nether aspect of your gas chariot (and of course you have, often!) it is a cinch that you prefer another point of view. Yet, if you assume the same posture on some mossy bank, fold your arms under your head and gaze up at the stars some perfect June night, you will affirm that there is nothing quite like it—unless, of course, you are in the "young (or old), and foolish" stage and would rather sit on said bank with some starry-eyed Juno and miss the constellations entirely by reason of gazing deep into her orbs. Those who have never done this may call such an occupation "eminently foolish"; we who have, agree that it may be "foolish" but is most distinctly natural and decidedly delectable. One can study two stars (blue, black or hazel) at a time, more satisfactorily than he can the milky way; and he doesn't have to crane his neck to do it either!

Therefore, after cogitating over these postulates, we may perhaps arrive at the conclusion that THE POINT OF VIEW has a whole lot to do with our conception of things and general conduct. That you, I, Smith, Jones and Mike O'Brien should see the same things in the same way is unlikely. That Smith should fail entirely to vision things the rest of us discern clearly is deplorable, of course—from our point of view—but that is the way Smith is constructed. If he suddenly saw as we see, he would lose his individuality, and that is worse than losing one's pantaloons. One can get another pair of those garments, but a new individuality? Never! At least not in this incarnation. And in the next, we might not wear anything to speak of. We are, as I see things, approaching that stage now. Of course, I may see a lot of things you don't; doubtless also, you have views I cannot share.

And this seems to be just the right place to reveal some of the reasons why I am talking thus loosely about the viewpoint. I have several. In the first place, my professional duties cause me to see many men maintaining mysterious maladies. Some of the "men" of course are "women." Often the latter maintain the superiority of their sex by having more mysterious maladies than the males. Not always, however.

Often, in seeking the *fons et origo* of these ailments and debilities, I have occasion to refer patients to eminent specialists of various persuasions. Reluctantly, but ruthlessly, I am being forced to the conclusion that most of these gentlemen possess but one eye, and that organ of vision is about minus 16. Therefore, they have acquired a mental lens which charmingly clarifies and satisfactorily sharpens their viewpoint—upon one limited spot! Furninst and beyant" that, they are stone blind. That is distinctly a drawback to everyone except themselves. When a patient walks into a consulting room, it is not desirable to see merely an animated abdomen, a perambulating prostate, or touring tonsils. One shouldn't think of a gastroduodenostomy because "Mrs. Wadand Doe" (of *the* Wadands) looks undernourished. She may have an over-animated husband, or harbor tenia saginata, or other squatters, in her innermost recesses. The fact that she was a "Wadand" and is now a "Doe" (and has it) doesn't really warrant such a limited point of view. To be sane, safe and worthy of confidence, it is wise to keep both eyes open and gaze all over the object, using one's hands to aid the eyes, for has it not been said, that "the quickness of the hand deceives the eye?" You can feel things you can't see—quiet often. I take it that we often also see things we can't feel. That which you can both feel and see is something quite tangible and worth the most earnest consideration. There are, as usual, exceptions to the rule: for example, you can see that a patient has scabies but you can't feel the itch. Some men can't even tell scabies from eczema, when they do see it. And then again, some

men feel like telling us just how to "cure eczema"—but I "can't see it." I still have to blunder along and overhaul and rectify the eczematous *individual*.

If you'll just lie gracefully on your back and think, you'll (mentally) vision a whole lot of other things which appertain to the peculiar points of view taken by part of the Profession. Of course, you'll not fail to observe that one of the most important is to make practice PAY. That is eminently correct, but one may become strabismic if he regards that end too closely. Specialize, if you will, but specialize from a broad point of view.

Now, not to confine my remarks to the men who "sooth the passage from the cradle to the grave," I would trustfully confide the fact that from the viewpoint of many, we are going to the Devil; from that of others, we have already *gone* and, as others see it, we are rapidly approaching the millenium — that glad time when *they* shall be lifted up and everyone else shall get distinctly what is coming to them. And, that, if one may judge from the general trend of the warnings extended, will be something very, very, *very* uncomfortable! The prophets of all good (and bad) things have been bombarding us with Stop! Look! Listen! propaganda until nervous people are afraid to buy a new hat. Perhaps, they may not need one? And, *parri passu*, the emissaries of Lucifer spread jazz, and decollette, and hip-flasks, and parental paresis, and intriguing instability generally with indefatigable zeal.

On many a Sabbath evening lately, I have heard first one Apostle vociferously assert that this poor old world is in its last degraded moments, and that those who playfully eat pork, depend on doctors and open oysters are inevitably doomed to join that innumerable caravan which will be cast into outer darkness, where there shall be gnashing of teeth! We, who don't gnash here, will have to do so f'r-evermore! I've tried to see how it feels to "gnash" but one of my bicuspids is longer than it ought to be, and I just can't do it satisfactorily. Then, over just two points on the dials, I have come upon an aggregation of evil-ones with brass instruments at their lips making sounds which would cause Methuselah to undulate and step sinuously and accompanying their whee-whee-omph-omph-oompah, hoo-oo, hi-yah, omph, oomph, whee-eee, whee-eee, zing! with words so torrid and understandable (even by the modern che-i-i-ld) that one blushes, fearing the Loud Speaker may say something rash on its own hook.

Of course, you can't stay and listen to *that* (tho' alas! so many of "our best people" are said to do so) and you turn over two more points and hear earnest souls singing "Rock of Ages." They sing it from their hearts, and one feels that at least some people are comforted by their faith.

That the followers of the "Death, Hell and Eternal Damnation" (with rising inflection, please) gentlemen, perhaps turn to syncopation in search of relief is a conceivable possibility. There are an awful lot of people in these days seeking happiness; most of them plaintively warble "I want to be happy, but I can't be happy till I make you happy too"— and they proceed to attempt to do it. They usually have the assistance of "something distilled" in an oval, vitreous container. Next one runs into more "popular music;" then into something classical, and so beautiful that it makes you really want to be something quite different from what you are, and then on the next wave length, you strike a Church which is radioing a "message." Unhappily, the Reverend Gentleman at the microphone has a bone to pick with other denominations, and loses his grip because he so definitely asserts that HIS way is the only way, and if you don't think as he does, you are "L-o-s-t, my brother, L-O-S-T!"

Now, in the course of my career I have heard so many of these "only ways" described, that I have come to the inevitable conclusion that someone has the wrong point of view. Further, that most of the expounders of sect theories are so myopic that they can't see at all the wonderful things they try so hard to describe. Why they even differ on such a fundamental thing as what "wickedness" *is*. They will tell you (or most of them will) that "the heart of man is desperately wicked." It is—and the more desperate, the more wicked. Give it HOPE, give it CHARITY, and give it FAITH in the innate goodness of everything here, and the hereafter will cease to have terrors. Moreover, to be happy, such hearts will have "to make you happy too." A really happy heart is never wicked. But, wine, women and the saxophones' sibyllantly salacious strains, never yet made a really happy heart. Neither, for that matter, did the "get it somehow and get it quick"

motif ever lead to cardiac content or spiritual serenity.

Therefore, as at the present moment, our people are more frankly self-indulgent and animal than they ever were, and as bootleg liquor is more demoralizing to the higher centers than the plebeian beer of the past, and as, "because they mustn't" everybody (or nearly everybody) must have it, and the excitement which is supposed to go with it, there is a lot of "looseness"; and the excellent exhorters have, from their point of view, very good grounds for arguing that the end must be near—or, if it really isn't, it ought to be. Unhappily, most of them merely point out the evil and don't offer any very satisfactory substitute. Instead, they threaten and denounce and then straightway cavil amongst themselves about the exact meaning of some phrase or the authenticity of some cherished principle of Faith, thus causing the hundreds of thousands who were led, but now (having acquired quassi-knowledge) prefer to go their own way, to become first, scoffers, then skeptics.

That is what, from my Point of View at least, most ails us today (if we really are ailing and not convalescing)—general skepticism! "Tell it to Sweeny" has become the motto of the people. They don't believe anything they can't see or feel—and they want to feel a whole lot. So, they proceed to acquire sensations. Some of them are pleasant—very—others not so charming.

The Assyrians, the Babylonians, the Romans and the Greeks lost their sense of perspective—they are but memories. The people who strove, who practiced the virtues (as we know them), who tilled the soil, hewed wood and had proper respect for themselves and their Maker, have survived, and what we are in greatness today, we owe chiefly to the great, simple men and modest women who founded the nation upon a rock. What this and the next generation will do to that rock remains to be seen. Mental deterioration we do not observe—though the exceptionally great minds produced in the past have not been so apparent in the last half century. Moral deterioration we sorrowfully must admit, and I think also, physical. The two things are apt to go together. Those of us who are optimists are inclined, however, to regard this as a transition stage, and are animated by the hope that out of the hurly-burly will come a race of supermen—men who will know what we cannot even guess at, and be able to do what we deem the impossible. Then perhaps, having reached the limit of human accomplishment, some cataclysm (perhaps of man's unconscious production) may sweep the race from the earth and leave the sphere free for the inscription of yet another chapter in the History of the Ages.

We are, as people have been before, woefully wicked, stiff-necked and set upon following our own devices, but that doesn't necessarily mean that the Archangel is about to sound his trump. Neither does it mean that from bad we must necessarily go on to worse. Quite often, as we of the Medical Profession so well know, there is a crisis before recovery. Even convalescence may be stormy, but perfect health ultimately obtains.

What happened fifty years ago has, of course, an influence upon the things of today, but it should be remembered that what happened ages ago, alone rendered the things of fifty years ago possible, and those who insist upon measuring today by yesterday and foretelling the happenings of tomorrow by the trend of today are like first-grade teachers trying to measure Mt. Hood with a six-inch rule for the edification of a class of philosophers!

In other words, the rational Point of View is a very broad one. We cannot see *only* depravity and impending destruction; we may, perforce, be compelled to admit that many of the indecencies of our fathers are now deemed decent, and that the fear of human or divine justice does not prevail to any very great extent, BUT this, our day, will pass as countless other days have passed and the leaven which always remains will doubtless again leaven the whole lump. At least, that is a consummation devoutly to be wished; if it doesn't materialize so much the worse for the lump.

Anyhow, *we* probably shan't be around to see the finish. The most we can do is gird up our own loins and run while we can, bearing in mind always that "the race is not ALWAYS to the swift." I have been in very close personal touch with several distinctly fast individuals and, well, they're full of formaldehyde now!

All of which is, of course, but one Point of View. There are oodles of others, if you don't like mine.

CONTRASTS

What's the good o' havin'
Skies that smile at you
If there wasn't ever
Clouds t' hide the blue.
What's th' good o' seein'
Grins that make you glad
If there wasn't, somewhere,
Faces that are sad?
Kind o' looks like sickness
Comin' for a spell
Sort o' makes folks gladder
For th' times they're well—
An' I know that posies
Seem a sight more sweet
Bloomin' up through ragweeds
'Round a feller's feet—
So it must be Heaven
Makes days dark an' blue
Just so things will glitter
When the sun busts through.

A JOY THOUGHT

All lanes, no matter how obscure and however beset with disappointment and disillusion and heartache, will, if we be but faithful, turn at last into the broad highway—a highway margined with blossoms and vibrant with the music of birds.—*Medical Pickwick.*

CONCERN

I never stop to ponder
As to whether we
Have ancestral monkeys
On the family tree.

But I'm always striving,
As the swift years pass,
To live so that the future
Won't think I was an ass.

—*Exchange.*

DRUGGIST'S QUEER ORDERS

A New York druggist is making a collection of the queer orders he receives from people who send children to the store for things they need. Here are a few samples of them:

"This child is my little girl. I send you five cents to buy two sitless powders for a grown adult who is sike."

An anxious mother writes:

"You will pleas give the lettle boi 5 cents worth of epicac for to throw up a five months old babe. N. B.—The babe has a sore stummick."

This one puzzled the druggist:

"I have a cute pane in my child's diagram. Please give my son something to release it."

Another anxious mother wrote:

"My little baby has eat up its father's parish plasther. Send an antedote quick as possible by the enclosed little girl."—*Doctor's Recreation Series.*

JUSTICE

Justice is a great little mixer. She horns in everywhere and meets up with everybody. She hits the long wilderness trail and hangs out in crowded marts. She visits tenements and palaces and may eventually get around to Congress. She cops the swindlers' swag and the bootleggers' boodle and restores the widow's twins. She is some kid and a dead shot, but occasionally seems to waste considerable time taking aim.—*Exchange.*

QUICK, DOC!

You can call Maud Maudie, and Kate Katie, and even Gracie don't sound so bad, but if her name's Belle you gotta stop right there.—*Medical Pickwick.*

A doctor who had taken up as his specialty the treatment of skin diseases was asked by a friend how he happened to select that branch of medicine.

"There were three perfectly good reasons," replied the physician. "My patients never get me out of bed at night; they never die, and they never get well."—*Exchange.*

Eminent Specialist—So you went to a general practitioner. What fool advice did he give you?"

Patient—He told me to see a specialist.—*Judge.*

Lady (to her doctor)—Don't you think that horseback riding will give me a headache?

Doctor—No, madam, quite the reverse.—*Exchange.*

Thumbnail Therapeutics

Mastoiditis

The recognition of mastoiditis, either by means of the skiagraph or by the presence of pain and tenderness over the process, is not, in itself, an indication for surgical interference, especially during the first week of an otitis media.—George E. Shambaugh.

Raisins

Raisins are a tonic in health and disease and a great help in insomnia.—Edit. in *Med. Rev. of Rev.*

Digitalis

In estimating doses of digitalis, do not forget that a tablespoonful of the infusion is equal to 35 minims of the tincture.—THEODORE TIEKEN, M.D.

Phlyctenular Conjunctivitis

Cases of phlyctenular conjunctivitis, in children, recover in half the time if they are kept out in the sun and air, *with dark glasses*, rather than in a closed and darkened room.—DR. J. I. DOWLING.

Appendicitis

Acute appendicitis is seldom responsible for other troubles in the abdominal region, despite the common belief.—Dr. Chas. Mayo.

Lithia Water

The one really efficacious factor in lithia water is not the lithium but the water.—James J. Walsh.

Pneumonia

General treatment.—The absence of unnecessary movement in order to avoid additional autoinoculation is imperative. Efficient nursing is therefore of primary importance. The patient should be kept at rest in bed, preferably in the supine position, no matter how mild the symptoms may be. Under no circumstances should he be allowed to sit up until the temperature has been normal for some days. As little physical examination of the chest should be made as possible once the diagnosis is clear. When it is necessary to examine the back, the patient should be gently rolled on to his side. He should not be allowed to talk more than is necessary, and in every way his strength should be husbanded.—Arthur Latham, in *The Oxford Index of Therapeutics*, p. 718.

Cardiac Palpitation

In palpitation, no *worse* drug can be given than digitalis. The following combination often proves very effective:

Quinine	gr. 1
Sprateine Sulph	gr. ½
Valerian	gr. 3 to 5

Give such a capsule every two hours. (It may be repeated once in one hour, if needed.) If the case is more or less chronic the dose may be given three times a day.—DR. BERNARD FANTUS.

Gonorrhea

In the abortive treatment of gonorrhea, polyvalent stock vaccines in large doses play an important part. There is no time to wait for the preparation of autogenous vaccines, as the chief factor for success is the promptness with which the treatment is applied.—M. CARLE.

Skin-Grafting

It is necessary to avoid all antiseptics and rely, wholly, on asepsis at and after the operation of skin-grafting.—A. F. BERTWHISTLE, F.R.C.S.

Psoriasis

A low protein diet is of undoubted value in psoriasis. If a psoriasis patient is put, for a number of weeks, on a diet containing about 4 Grams of nitrogen per day, astonishing results will often be observed.—J. D. SCHAMBERG.

Glaucoma

Glaucoma is frequently complicated by disease of the nasal sinuses. Many cases of this disease respond well to ¼ to ½ grain doses of thiosinamin, four times a day, increasing cautiously from the former to the latter dose, if the drug is well tolerated.—DR. J. I. DOWLING.

Unsightly Warts

In reply to Dr. G. S. Sander (*Lancet*, Aug. 2, p. 256), a young woman had a wart so large it resembled a black teat under her chin. By my suggestion, she washed it

with carbolic soap, also dampened it slightly and rubbed the soap against it so as to leave a little about it. It soon disappeared, leaving no trace. I have never seen warts which carbolic soap, used in that way, would not quickly cure.—M. L. J.

Sinus Infection

Ventilation and drainage are the *sine qua non* of nasal surgery.—Dr. J. I. Dowling.

Malarial Prophylaxis

Quinine, taken in doses of 0.2 Gm. (3 grains) night and morning, acts as an effective prophylactic against malarial infection. —R. A. Gutman, in *Le Monde Medical.*

Urticaria

In urticaria, angioneurotic edema and serum sickness, epinephrin, given hypodermically in doses of 0.5 to 1.0 Cc. of the 1:1000 solution, produces, as a rule, striking amelioration of the symptoms. On their recurrence, epinephrin should be repeated.—Dr. H. A. Christian, in *J.A.M.A.*

Hyperthyroidism

Typical hyperthyroidism may be produced by infection of the nasal sinuses, and relieved by removing the nasal infection.—Dr. S. L. Ruskin, in *J.A.M.A.*

Pneumonia

It is essential that the pneumonia patient does not have too much "nursing" and home "care."

A quiet room; a level-headed nurse; no "sitting-up;" fresh air; low temperature; wholesome, nourishing liquid food; plenty of sleep and rest; the suffering controlled; and, whatever the medication is, the above plan lays a most excellent foundation for it, in my opinion.—Dr. H. N. Jennett in *The Medical Herald.*

Codeine

Codeine possesses one-eighth the analgesic power of morphine and, therefore, when this drug is selected for the relief of pain the dose should be *one grain*, where you would give ⅛ grain of morphine.—Theodore Tieken, M.D.

Atropine

Atropine has two distinct effects upon the heart-rate when this is regular. In small doses it merely slows it, probably by stimulation of the vagal centers. In large doses, of course, it hastens it by paralyzing the vagal endings in the heart. It also then tends to remove any existing heart-block. If the dose be neither large nor small, there will be no change in the heart-rate, the two effects of stimulation of the vagal centers and partial paralysis of the nerve-endings neutralizing each other. Individuals vary very much in their reaction to atropine. In most adults, 1/100 grain will merely slow the heart, in some no effect will occur, while in a few a slight hastening sets in. In the last two groups, it is usually only necessary to lessen the dose to get the slowing effect.—Rudolf & Bulmer, in *Amer. Jour. Med. Sci.*, November, 1924.

Changing Methods

The old method of dealing with diseases was to await the attack and then treat the patient. The new method is to take the offensive against the bacterial enemy.—William Potter, President Jefferson Medical College.

Coughs

Do *not* give opiates in cough, under any conditions, as they inhibit the salutary coughing reflex and prolong the case.—Dr. Bernard Fantus.

Neoarsphenamine Intramuscularly

If neoarsphenamine is administered intramuscularly in 7 percent acacia containing 5 percent alypin, no infiltration or rubefaction will occur, and results are satisfactory. —Edit., *Calif. State J. Med.*, 1924.

Milk Injections in Paresis

Dr. Moravcsik, of Budapest, states that milk injections are more effective in paresis than antisyphilitic treatment. — *Lancet* (London), 1924.

Chilliness

The sensation of a "draft," when there is none, or abnormal sensitiveness of the skin to cold, is a sign of pus somewhere, usually in a closed cavity.—Dr. J. I. Dowling.

Migraine

Bigland claims to obtain good results from the use of calcium lactate as a means of aborting migraine. At the first sign of an attack, as evidenced by the ocular aura, 30 grains of the chemical are taken. It is reported that in many cases it prevents the appearance of the headache and vomiting, and enables the sufferer to continue at his occupation.—*Amer. Med.*, 1924, XXX, p. 49.

Current Medical Literature

DIAGNOSIS OF ABDOMINAL ILLNESS IN CHILDREN

In the *Lancet* for October 11, 1924, Gordan Bryan, of London, considers this interesting subject in an excellent manner.

One must not be deceived at the onset by the fact that, in children, the severe toxemia present may produce symptoms which mask the abdominal nature of the illness.

The best means for objective examination are abdominal palpation and rectal examination. The chest and the urine must be carefully examined. The presence and location of pain, tenderness, rigidity and tumor must be brought out and considered. Combined recto-abdominal palpation gives much information.

Appendicitis is quite common in children, but it is well to remember that, in them, it is not unusual to find the appendix in abnormal positions. The inflamed and swollen organ can usually be palpated through the thin abdominal wall if one will be gentle and take enough time.

From acute appendicitis we must diagnose acute pyelitis, acetonemia, intestinal influenza, simple colic, iliocecal adenitis, iliac abscess, and peritonitis of pneumococcal and gonococcal origin.

Intestinal obstruction may be due to intussusception, volvulus of the small bowel, adhesions or strangulated hernia. Occasional cases of Henoch's purpura sometimes complicate the diagnosis.

MERCUROCHROME BY MOUTH

In the *Journal of Urology* for September, 1924, Drs. Hugh Young, N. W. Scott and J. H. Hill report some interesting experiments made with mercurochrome.

While the experiments were not extensive and the results cannot be considered conclusive, they believe that doses of 0.9 Gram of mercurochrome daily, by mouth, markedly reduce the number of bacteria in the feces and urine, and probably also in the bile.

It appears that this treatment will prove of value in colitis, and other infections and inflammations of the gastrointestinal and urinary tracts, as well as being a prophylactic measure before surgical attack upon either of these anatomical systems.

COLDS

Common colds may be divided into three classes: (1) Digestive, (2) Vasomotor, and (3) Infective.

Those of the digestive variety rest upon a basis of acidosis and are frequently associated directly with the ingestion of certain foods. They are characterized by itching and stuffiness in the nasopharynx, but lack the profuse nasal discharge found in the infective variety.

The treatment consists in detoxication and antacid medication with the elimination of offending foods from the diet.

The vasomotor variety occurs particularly in nervous and "high-strung" people, of both sexes, and bears a close relation to sexual activity, being most common at puberty and the menopause, or during periods of sexual excitement.

In these cases there is a turgescence of the erectile tissues of the nose, with a feeling of oppression, severe headaches, and a dulling of the mental faculties.

No operative procedures should be undertaken upon adolescents suffering from this condition, as the removal of turgescent structures may result in a dry and scabby nose in later life.

The only measures for relief consist in a study and correction of faulty habits of living. At best these cases are unsatisfactory to handle.

The infective variety is the one which is most commonly recognized as a "cold," and consists of the prodromal, dry, wet and mucopurulent stage so familiar to all physicians. The treatment and prophylaxis consist in the correction of nasal deformities, combating acidosis, regulating diet, exercise and ventilation and accustoming the skin to cold air or cold water, or both.

It should not be forgotten that this variety of cold is an infectious disease, and when possible, the patient should be isolated and all discharges from the nose and throat received in squares of gauze and burned.—Harmon Smith, M.D., Sc.D., in *Med. Journ. & Record*, N. Y., Dec. 17, 1924.

—

[Dr. Smith has laid no stress on the local treatment with antiseptics, in cases of infective colds, but we feel that this is of considerable importance and that much benefit accrues to such patients by douching

or swabbing (*not* spraying!) the nasal passages with proper solutions of such antiseptics as metaphen and chlorazene.—ED.]

NUTRITION AND TOOTH DECAY

In an article entitled "The Influence of Nutrition on Deformities and Decay of the Teeth" (*Dental Cosmos*, April, 1924), Dr. W. E. Deeks, General Manager Medical Department of the United Fruit Company, sums up the factors which are concerned in the abnormal eruption of teeth and their decay by saying:

"We must take into consideration heredity, nutrition and environment, and of these nutrition probably plays a chief role, inasmuch as its influence antedates even conception and thus influences heredity.

"If we wish to preserve our teeth, a well-balanced diet is necessary and must be derived from both animal and vegetable sources. Our chief supply of protein should be from the animal kingdom—meat, fish, milk, cheese and eggs; our fats from the animal and vegetable kingdoms; and our starches and sweets from cereals, tubers, green vegetables and fruits. All cereal-derived foods should be made from the whole grain. Whole wheat flour and the old-fashioned cereals in the form of cracked wheat, oatmeal and cornmeal are to be preferred to bread, cake, macaroni, etc., made from milled wheat, and to the popular commercial cereals now in general use.

We must avoid excessive use of sweets and sweet foods, particularly sweet desserts, pastries, ice cream, sodas, etc., which are very fermentable and adhere to the teeth, and these should be substituted by fresh ripe fruit.

The amount of starchy and sweet foods consumed will depend largely on the amount of work performed and the muscular energy expended. Persons engaged in sedentary occupations can not handle as much starchy and sweet foods as those engaged in vigorous exercise.

"A well-balanced diet must include a considerable amount of leafy green vegetables and fresh fruits, for they are the chief sources of vitamines and alkaline inorganic salts, a deficiency of which brings about acidosis and organic decay, early senility and premature death. We must return to more primitive methods of preparing foods and thus avoid disaster for ourselves and our progeny.

"Defective development and deformity of the teeth are influenced by heredity, which is the accumulated effects of ancestral histories in the germ-cells plus the influence of nutrition and the environment (physical and mental) of the people producing them.

"After the mother ceases to nurse, the nutrition of the child plays the chief role in the formation of healthy tissues or their early degeneration and decay. The diet of the vast majority of our people today is not only very fermentable, but is also deficient in vitamines and inorganic salts.

"An inadequate supply of vitamines results in incomplete metabolism and interference with the proper functioning of the endocrine glands.

"If there is an inadequate supply of inorganic salts in the diet, the most available source to meet this starvation is the teeth, which are called upon to meet vital requirements, and in consequence are structurally weakened and rendered liable to bacterial invasion and decay, accelerated by the acids resulting from fermentable foods, such as sweets and starches."

DANGER IN BROMIDES

Nearly twenty-five years ago there appeared in the *Therapeutic Gazette* a symposium contributed to by a number of physicians who held responsible positions in hospitals for the care of epilepsy or insanity. That symposium clearly indicated that, in many instances, patients were brought to such institutions suffering quite as much from the abuse of the bromides as from the original malady which had caused their administration.

In order to learn if medical thought in reference to these drugs has changed, the same periodical, in its October 15, 1924, issue, prints another symposium in which several prominent physicians of the present day give their views. Dr. F. H. Packard, of the McLean Hospital, Waverly, Mass., for one, answers as follows:

(Ques.) 1. Is it your opinion that the free use of the bromides before the patient comes to your institution has done him harm, and has this practice materially increased your difficulties in doing what is possible for this class of patients?

(Ans.) Yes.

(Ques.) 2. What measures do you find best suited to rid the patient of the cumulative effects of these drugs?

(Ans.) Ample amount of food and liquids—tube feeding if necessary; reasonable catharsis.

(Ques.) 3. What is your opinion as to the relative value of the bromides and luminal (phenobarbital) in epilepsy?

(Ans.) Have used luminal only to a limited extent and in small doses, but it seems to be of value in some cases and I have seen no bad effects.

(Ques.) 4. Have you noticed in your practice that the administration of the bromides in full doses ever produces mental alienation or delusions?

(Ans.) Formerly many cases of drug delirium due to bromides were seen. Not so many of late.

(Ques.) 5. If so, have the symptoms of the patient been those of sedation or excitement?

(Ans.) Typical drug delirium.

(Ques.) 6. Has a single full dose ever produced such symptoms?

(Ans.) Have never seen one.

(Ques.) 7. Do you think that such untoward effects of the bromides are more commonly met with than is generally thought?

(Ans.) Formerly, I should say so, but in this locality the profession seems to have been somewhat enlightened.

A great many readers of CLINICAL MEDICINE probably share these views. The use of the bromides, except with the greatest circumspection, is fraught with danger, therefore many now turn to barbital, luminal and chemically related drugs when sedation is required.

INFLAMMATORY CARCINOMA OF THE BREAST

In the November, 1924, issue of *Surgery, Gynecology and Obstetrics*, Drs. Burton J. Lee and Norman E. Tannenbaum, of New York City, contribute a very instructive study of the above condition, based on 28 cases seen by them at the breast clinic of the Memorial Hospital.

They consider the condition a distinct clinical variety of breast carcinoma, characterized by a diffuse carcinomatous infiltration of the skin and lymphatics, which results in prompt and certain recurrence following surgical intervention.

This type has been frequently mistaken for other diseases of the breast, although the inflammatory appearances are characteristic, when well understood.

The treatment which appears to offer the only prospect of cure, and the best prospect for palliation and lengthened life, is by means of external radiation with x-rays, carried out by a competent radiologist.

SKIN COMPLICATIONS OF GONORRHEA

In this country gonorrhea is commonly considered to be a strictly local disease, showing rather rare metastases to the joints, etc., but in Europe the general feeling, today, is that it is a systemic disease with symptoms predominantly localized in the urethra.

In *The Urologic and Cutaneous Review*, for Sept., 1924, Dr. W. S. Pugh, of New York, discusses the cutaneous manifestations which sometimes occur in gonorrhea and reports two very instructive cases.

One of the most valuable features of the paper is the very complete bibliography of the literature of Neisserian infections of the skin.

ARSPHENAMINE IN BLOOD TRANSFUSION

Flandin and Tzanck, page 1411, in the *Bulletin de la Societe Medicale des Hopitaux* (Paris), note:

On the basis of 300 transfusions during three years, Flandin and Tzanck regard arsphenamine, which was added to the blood, as superior to all other substances used to prevent coagulation, including even sodium citrate. They report surprising results in two cases of profuse hemorrhage in typhoid, in which 320 Cc. and 250 Cc. of blood were injected, mixed with 0.03 Gm. of sulpharsphenamine per hundred cubic centimeters of blood. (*J.A.M.A.*, Nov. 29, 1924.)

COLONIC ANESTHESIA

Physicians meet with numerous cases which require surgical intervention, but in whom local anesthesia is impracticable and respiratory anesthesia contraindicated or very disadvantageous, as in neurotics and the insane; in goiter and hyperthyroidism; and in operations about the head, neck and upper respiratory passages. In such cases, colonic anesthesia is very helpful and its only contraindications are inflammatory processes in and around the rectum and colon, and those conditions where ether, by any method, is contraindicated.

Technic:

1. Cathartic 48 hours before operation.

2. A soapsuds enema 10 or 12 hours before operation.

3. Tap-water enema 3 or 4 hours before operation.

4. One hour and 15 minutes before operation give a hypodermic of 1/6 to 1/4 grain of morphine, with atropine, and a suppository of 10 grains of chlorbutanol.

5. One hour before operation introduce into the rectum the oil-ether mixture shown below, in the following manner:

The patient lies in the left Sims position and a small-calibre rectal tube is inserted.

The freshly prepared oil-ether mixture is poured from a warmed, flannel-covered bottle into a funnel attached to the end of the rectal tube, so slowly as to take 10 to 15 minutes for the procedure. The rectal tube is left in place and closed with a clamp. The room is darkened and a cloth placed over the patient's eyes and cotton in his ears. Absolute silence must be maintained and nothing done to attract the patient's attention. As soon as the patient is asleep, the face is covered with a wet towel to favor rebreathing. Surgical anesthesia should be produced in 45 to 50 minutes.

The dose of ether given depends on the size, habits and general makeup of the patient. The following is the average formula for doses of 4, 5 and 6 ounces of ether:

Ether	4 oz.	5 oz.	6 oz.
Paraldehyde	2 drams	2 drams	2 drams
Olive oil	2 oz.	2½ oz.	3 oz.

An hour after injecting the ether, the patient may be removed to the operating room. If anesthesia is not sufficiently deep, a little ether may be given by inhalation.

If anesthesia becomes too deep, release the clamp on the colon tube and let the remaining mixture escape, pressing over the sigmoid and, if necessary, flushing out the colon.

On returning the patient to bed, the colon is *at once* flushed out and an enema of hot coffee introduced. Morphine should not be ordered. The patient generally sleeps for several hours.—DRS. H. WILLY MEYER, of New York, and B. F. ROBBINS, of Salt Lake City, in *J.A.M.A.*, for November 15, 1924.

CAUSES OF MENTAL BREAKDOWNS

In the *Journal of the Medical Association of Georgia*, for November, 1924, Drs. J. N. and K. F. Brawner, of Atlanta, contribute an interesting study of 210 cases of mental breakdowns (including psychoses, psychoneuroses and neuroses of sufficient severity to require hospitalization) in which they endeavored to ascertain the cause of the condition.

Their results may be tabulated as follows:

Due to direct invasion of the brain by microorganisms—15 percent.

Due to focal infections in other parts of the body—7.5 percent.

Due to defective constitutional makeup—25 percent.

Due to use of alcohol and other drugs—10 percent.

Due to autotoxemia—16 percent.

Due to senile changes—5 percent.

Due to endocrine disturbances—3 percent.

Due to psychic shocks—7 percent.

Due to miscellaneous causes (defective diet, the puerperium, physical overwork, etc.)—11.5 percent.

The figure for all infections causes (22.5 percent) and for defective constitutional makeup would probably prove to be higher if all factors could be determined.

MASTOIDITIS—CONSERVATIVE TREATMENT

There is great need for more careful study by physicians of the anatomical relations of the external auditory meatus, tympanic cavity and nasopharynx.

In many cases, adequate and skillful treatment of nasopharyngeal infections will obviate the necessity for mastoid operations; and the same result can often be arrived at by assuring free drainage of the tympanic cavity through the eustachian tube and the external auditory canal.

The confusing symptoms which often accompany middle ear and mastoid involvement necessitate painstaking differential diagnosis, to obviate needless surgical exploration of the mastoid and surrounding structures.—DR. J. ADDISON LEE, of Kansas City, in November, 1924, *Eye, Ear, Nose and Throat Monthly.*

ACIDOSIS IN CHILDREN

Dr. Herman B. Sheffield, in *The Medical Journal and Record* (New York), for November 19, 1924, states that acidosis in children can be differentiated from appendicitis, intussusception, etc., by the fact that, in the latter diseases, the child vomits everything, while in acidosis, *dry foods*, such as crackers, sweet biscuits, etc., are retained, though all liquids may be vomited.

This point is of much importance in treatment, also, for the nutrition may be maintained, and sodium bicarbonate given dry, mixed with sugar, under the tongue.

The diet must be carefully watched until the urine is entirely free from acetone.

THREE PATHOGNOMONIC SIGNS

In *The American Physician*, for December, 1924, Dr. R. T. Morris, of New York City, gives three signs which he considers pathognomonic.

Chronic Appendicitis. If the fused sympathetic ganglion, 2 inches to the right

of and slightly below the navel, is more sensitive than the one on the left and the one a short distance above the navel, chronic appendicitis is present.

Loose Kidney. In a case of movable kidney, if the abdominal muscles are persistently rigid, nephropexy is indicated.

Cervical Lacerations. When doubt exists as to the necessity for repairing a moderate cervical tear, press lightly with some instrument on the tissues at the angle of the laceration; if marked pain is referred to the naval or epigastrium, operate; if not, no operation is necessary. This is Emmett's sign.

DIAGNOSIS OF ECTOPIC GESTATION

In the *New Orleans Medical and Surgical Journal*, for November, 1924, Dr. P. Michinard, of New Orleans, outlines the cardinal points in the diagnosis of tubal pregnancy as follows:

1. A woman of child-bearing age seized with acute, severe, abdominal pain, with shock or syncope, even though of short duration, should be considered a possible ectopic pregnancy until proven not to be such.
2. The more attention is directed to irregular bleeding rather than to amenorrhea the less often will one fail to recognize ectopic.
3. With very few exceptions, the longer the amenorrhea the more likely is the pregnancy to be intrauterine.
4. A leucocytosis quickly following abdominal pain, vomiting and shock *without* an elevation of temperature should be attributed more to ruptured tubal than to appendicitis.
5. To depend on a history of having or not having expelled decidua is to court error.
6. When there is evidence of ectopic gestation and no mass can be felt while the patient is awake, or if there is doubt whether there is early pregnancy in an abnormal uterus, it is advisable to examine the patient under deep anesthesia before operating.
7. When in doubt as to whether the condition is an incomplete abortion, and curettage is contemplated, *don't do it.*

NERVOUS ANOREXIA IN CHILDREN

Harold A. Rosenbaum makes some pertinent suggestions relative to matters which are frequently overlooked, in the December, 1924, number of *Hygeia.*

He calls attention to the fact that there are other causes besides physical disease which are responsible for the poor appetite in children, which is often such a cause of anxiety to parents and physicians.

A child is an emotional, impressionable being, and his reactions to his surroundings are not greatly different from those of his elders.

Hurry, disappointment, anger and excitement frequently abolish appetite, as does also noisy discussion, reproofs, comments on the child's lack of appetite and bickering at meal time.

The fact that less and less cooking is being done in our homes, and more and more recourse is had to the delicatessen and the can-opener, is depriving us of one of the most potent stimulants to appetite—the appetizing odors of cooking food.

When you have a malnourished child who "eats like a canary," and who does not improve when physical abnormalities have been corrected, look into his home environment and see if it may not be his parents who need some treatment.

The Practitioner (London), for November, 1924, contains an article along the same lines by Dr. Bernard Myers.

OBSTETRICAL ANALGESIA AND ANESTHESIA

In the December, 1924, number of the *Journal of the Michigan State Medical Association*, Drs. C. H. Davis and R. S. Cron, of Milwaukee, contribute an interesting article on the above subject, which they summarize as follows:

1. Hypodermic medication is indicated for a painful first stage of labor. Heroin grs. 1/12 or morphine grs. 1/6 and hyoscin grs. 1/100 is the usual dose, this being administered in two parts if the pain is not severe. A long first stage requires additional hypodermics.
2. Nitrous oxide-oxygen is still the analgesic of choice during the second stage of a normal labor. A tetanic labor requires a more powerful anesthetic and ether is used. Ethylene-oxygen in smaller amounts may be used in place of nitrous oxide-oxygen, its explosibility being the main objection.
3. A patient must receive enough anesthetic to produce analgesia before a given contraction reaches the painful phase. This requires very prompt administration after the first suggestion of an approaching contraction. Failure to relieve pain is more the fault of the anesthetist than the anesthetic.
4. Each case must be individualized. Adapt the anesthetic to the patient's needs at different stages of labor. Version requires complete relaxation. Forceps delivery may be accomplished with analgesia or light anesthesia.
5. Anesthesia may contribute to fetal asphyxiation but birth pressure is to a much greater extent responsible. Sudden or marked changes in the fetal heart rate

should serve as a warning. The fetal heart should be taken every few minutes during the perineal portion of labor and evidence of fetal asphyxia should lead to a prompt delivery.

6. Women are now expecting to suffer little or not at all during labor and as a result are much harder to please than those delivered ten or more years ago. The reduction of pain has relieved hospitals from the undesirable noise of obstetrical patients, and has made childbirth a less hideous procedure. The future will bring even more satisfactory methods.

SODIUM THIOSULPHATE FOR ARSENICAL TOXICOSIS

The occasional onset of dermatitis and jaundice when arsenic is given medicinally has made desirable an antidote; several have been proposed, among which sodium thiosulphate is the one most frequently used.

A preliminary report on this drug was made by P. Ravaut (1920). McBride and Dennie (1922) gave a more detailed report showing the clinical application in cases of arsenical and mercurial poisoning. Nyiri (1922), discussed the action of the drug in its relation to kidney function test. Sutton (1923), Hoffman and Schreus, and Semon (1924) have discussed its clinical application. Mathieu (1921) obtained favorable results from the use of $Na_2S_2O_3$ in certain types of edema and chorea. Okerblad (1923) used it sucessfully in lead poisoning.

Numerous other reports have appeared in the proceedings of various societies showing its favorable clinical action as an antidote for arsenic, bismuth and mercury poisoning.

During the past few years it has been ascertained that the drug may be given either by mouth or intravenously. In the first instance the excretion rate of the arsenic is not as rapid as in the case in which intravenous methods give a more abortive effect. The toxicity is very low and the drug can be administered with safety by either route.

Several cases of arsenical toxicosis are reported by Drs. Groehl and Myers (*Ther. Gaz.*, Oct. 15, 1924) in which this antidote was given with good results, results which have been duplicated in a large series of similar cases. Thus investigations show that after the intravenous administration of 1 Gram of drug about 30 to 40 percent goes over into the urine unchanged, the remaining portion being oxidized to sodium sulphate and sulphur compounds common to the human economy. In the case of oral administration about 86 percent of the orally ingested sulphur is in the urine. This author believes that oxidation is complete and goes to the form of the sulphate. These results are accompanied by excretion experiments and seem to be substantiated by fact.

As originally pointed out by Dennie and McBride, the sulphur atom was desired because it offered greater possibilities for oxidation and reduction. Sodium thiosulphate was selected in preference to calcium sulphide and organic sulphur compounds, for the reason that preliminary clinical trial showed it to be more active dynamically than other products at our disposal. Sodium thiosulphate, when added to the salvarsan protein precipitate, shows that it does dissolve the substance directly.

CANCER A GREATER MENACE TO LIFE THAN TUBERCULOSIS

It will come as a surprise to most persons to be told that at the present time a man or a woman is more likely to die of cancer than of tuberculosis. This will appear, at first thought, as a paradox in statistics, because the deathrate from tuberculosis is, as yet, a little higher than that from cancer. In 1922, for example, the tuberculosis deathrate in the Registration Area was 97 per 100,000, while that from cancer was 87. Nevertheless, it is true that a child having once reached 10 years of age is, according to present indications, in greater danger of dying ultimately from cancer than from tuberculosis. The explanation of this somewhat astonishing statement lies in the fact that tuberculosis claims its victims heavily in early adult life, whereas cancer does not begin to do its most deadly work until middle life. In an actual population, tuberculosis has relatively more material to work on than cancer, and the proportion of the two deathrates does not represent the "betting odds" that a child of 10, for example, will eventually die of tuberculosis or of cancer, as the case may be.—*Statistical Bulletin*, Oct. 1924.

New Books

BANDLER: "THE EXPECTANT MOTHER"

The Expectant Mother. By Samuel Wyllis Bandler, M.D. Illustrated. Philadelphia and London: W. B. Saunders Company. 1921. Price $1.25.

The busy physician rarely has time to go through a large textbook on obstetrics very frequently, but it would do him good to review the fundamental facts of the physiology of the female generative organs and of impregnation, pregnancy and parturition quite frequently.

Nurses, students and social workers often feel a need for a small volume which will give them this necessary fundamental information, stripped of technicality and in simple language.

All who deal, in any way, with expectant mothers will find much of value in this book, especially those, such as social workers, who do not have ready access to the more elaborate treatises on gynecology and obstetrics.

BARNES: "THE TONSILS"

The Tonsils, Faucial, Lingual and Pharyngeal. With Some Account of the Posterior and Lateral Pharyngeal Nodules. By Harry A. Barnes, M.D. Illustrated. Second Edition. St. Louis: C. V. Mosby Company. 1923. Price $5.00.

The literature on the tonsils is so voluminous that one who wishes to familiarize himself with the concensus of modern thought on this subject might spend weeks in reviewing it. Such a necessity is obviated by the book in hand, which brings under one cover all that is really necessary to know regarding these much-discussed organs, and includes the consideration of the lingual, faucial and pharyngeal tonsils.

Keeping always in mind the fact that abstract medical knowledge, to be of the highest value, must have a clinical application, the author discusses the embryology, anatomy, histology, function and pathology of the tonsils and then proceeds to the consideration of their diseases and the treatment of the same.

Summing up the chapter on function, Dr. Barnes states, "The tonsils should, by all means, be respected as functioning organs, especially in children, and should never be removed without adequate cause. But, when such cause exists, the loss of their functioning power should not be used as an argument against their complete extirpation."

The section dealing with the surgery of the tonsils is excellent. Full details of technic are given, accompanied by many illustrations showing successive steps in the various procedures. Especial attention is given to local anesthesia.

In the present (second) edition, the newest conceptions regarding operative technic are embodied; the subject of focal infections is given attention; and the radium and x-ray treatment of diseased tonsils is discussed at length.

Any physician who purposes to undertake operative work on the tonsils can not afford to overlook this treatise; and it will prove valuable even to those who do no surgery.

"CHEMISTRY IN INDUSTRY"

Chemistry in Industry. By twenty-one authors and edited by H. E. Howe. American Chemical Society, 85 Beaver St., New York. Cloth, 371 pages. Price $1.00 postpaid.

Science has become so broad in its scope that a follower of one phase of it finds difficulty in maintaining his grasp of even the basic facts concerning another branch. Time usually prevents an intensive study of a technical subject not our own, and in order to be able to keep up to date in such a subject, it is necessary that the information be presented in a condensed, interesting and assimilable form.

In the field of chemistry, that is precisely what the American Chemical Society, with the support of the Chemical Foundation, has been doing. It will be remembered that almost two years ago there were distributed by the American Chemical Society, at a very low cost, sets of five books, which constituted a sort of open sesame to the realm of chemistry. Now, in furtherance of that plan, there has appeared "Chemistry in Industry," a very readable book containing information about many of the most important industrial applications of chemistry. The book is written by twenty-one authors, each an authority in his own particular

branch of the science, and is ably edited by H. E. Howe, editor of *Industrial and Chemical Engineering*. We find lucid descriptions of the manufacture of such products as glass, fertilizer, petroleum, photographic supplies, leather, industrial gases, electrical products, cotton and cotton products, alcohol, abrasives, iron and steel, packing-house products, rubber, textiles, perfumes and flavors, pulp and paper, and synthetic resins; in addition, there are indicated some of the problems in those fields which await solution.

The book is well bound and printed, contains 371 pages, and sells for a nominal price, which is possible only because of the cooperation of the Chemical Foundation with the American Chemical Society. The authors are not paid for their contributions, having cooperated in order to explain some of the essential relations of chemistry to our daily lives.

The book must be read to be appreciated.

"ADVANCES IN MEDICINE"

Advances in Medicine. Vol. VI. Edited by Dr. T. Brugsch. Urban & Schwarzenberg. Berlin. 1924. Paper. 320 pages.

This book, which comprises the first and second parts of the sixth volume of the series, is a valuable addition to medical literature. The most recent developments in the fields mentioned are taken up for discussion, and extensive bibliographies of the newer literature are given.

The chapters included in the present volume are: Newer Syphilis Therapy; Vegetative Nerve System and Psychic Unbalance; Asthenia of Women; The Treatment of Unbalanced Heart-Beat by Digitalis; Extrauterine Gravidism; Pathogenesis and Operative Treatment of Gall-Stones; The Treatment of Phlegmon; Strabismus and Its Treatment.

The first chapter, on Newer Syphilis Therapy, written by Dr. Paul Mulzer, is of particular interest, and is quite representative of the manner of presentation of the subjects. The later developments in the use of compounds of arsenic, mercury and bismuth, and in the use of mixed injections of these, are discussed and the various better known commercial products are evaluated, so far as possible. The abortive treatment of syphilis is also considered.

For résumés of the subjects indicated, the work will prove of distinct value.

E. H. V.

ELLIS: "LOVE AND VIRTUE"

Little Essays of Love and Virtue. By Havelock Ellis. New York: George H. Doran Company. 1922. Price $1.50.

Within the present generation, marked and significant changes have come over our ways of looking at many things, and in few fields are these changes of more fundamental importance than in our conceptions of the relations between the sexes.

There are few, if any, men living today who have given more deep and thoughtful (one might almost say *prayerful*) study to the higher phases of sexual relationships than has Havelock Ellis, whose "Studies in the Psychology of Sex" is now, and will long remain, a monument to his scientific enthusiasm and high literary attainments.

The present volume is a delightful study of the changing attitude of the public mind on these subjects, and a broadly-based and earnest plea for less prudery and suppression of our finer feelings and more joy, more passion, in its highest sense, in our living and loving.

If this book could be placed in the hands of every young couple before marriage, it would furnish them with a fundamental basis of psychological knowledge which would enable them to avoid many of the disastrous errors into which so many fall; and we firmly believe that it might be the means of extricating some of those who have fallen into these errors from the unsatisfactory, and sometimes impossible, situations in which they find themselves.

DALLY: "HIGH BLOOD PRESSURE"

High Blood Pressure, Its Variations and Control. A Manual for Practitioners. By J. F. Dally, M. A., M. D. New York: William Wood & Co. 1924. Price $3.25.

In these days, no truly scientific physician would attempt to practice medicine without using a sphygmomanometer, as the importance of blood pressure readings is now universally recognized.

There are, however, a good many conscientious practitioners who have hesitated to purchase one of these instruments because they realize that its intelligent use requires a considerable amount of study which they, being very busy men, have been unable to undertake, due to the fact that the literature on the subject is widely scattered and not easily available.

To such men, the publication of the volume under review will be a boon, for here, under

one cover, are all the facts regarding blood pressure estimations which it is necessary to know in order to take readings and interpret the results.

The anatomical and physiological factors affecting blood pressure—normal and pathological—are briefly and clearly considered, and the clinical indications for this procedure with the technic of taking and interpreting readings are fully explained.

All the principal types of sphygmomanometers are considered in detail, with clear instruction as to how to select a satisfactory instrument.

Chapters are devoted to high blood pressure, its cause and significance, and to the diagnosis and prognosis of this condition and to its control; the last-named chapter dealing fully with all the most modern methods of examination and treatment.

Special attention is given to considering the relation of blood pressure to tuberculosis and to life insurance work.

At the end of the book is a brief history of blood pressure estimation and a satisfactory bibliography.

The book is clearly and practically written, so that it is, in effect, a post-graduate course on the most modern phases of this interesting subject, and there is scarcely a medical man in the country who would not profit largely by its perusal and the application of the teachings it so adequately presents.

ALCOHOL

The subject of alcohol has been more prominently before our minds during the last few years than ever before, and more, perhaps, than almost any other subject of discussion.

We do not purpose to enter upon any discussion of the Eighteenth Amendment, considering the subject to be of too highly controversial a nature to warrant its inclusion in a scientific periodical.

However, it behooves all physicians to be familiar with the most modern thought on the medicinal and social aspects of the alcohol question, and, while conditions in England are quite different from those in this country, it is believed that this very difference makes for a saner and less biased consideration of the question by our confreres across the Atlantic.

The October number of *The Practitioner*, London, is a special Alcohol Number, and the contributors are men of such undoubted eminence that a list of the contents of this number is appended.

Alcohol in Medicine: By Sir Humphrey Rolleston, Bart., K.C.B., M.D., Hon. D.Sc., D.C.L. Physician in Ordinary to His Majesty the King; President, Royal College of Physicians.

The Social Aspects of the Alcohol Problem: By Sir Arthur Newsholme, K.C.B., M.D., F.R.C.P. Late Principal Medical Officer to the Local Government Board.

The Physiological Action of Alcohol: By Professor Ernest H. Starling, C.M.G., M.D., F.R.C.P. Foulerton Professor of Physiology, Royal Society.

Alcohol and the Nervous System: By Sir James Purves-Stewart, K.C.M.G., C.B., M.D., F.R.C.P. Senior Physician to Westminster Hospital.

Alcohol in Its Relation to Insanity: By Sir Frederick Mott, K.B.E., M.D., F.R.S., F.R.C.P., Hon. LL.D. Director of the Course of Psychological Medicine, Maudsley Hospital, L.C.C.

Alcohol in Its Relation to Life Insurance: By Sir Richard Douglas Powell, Bart., K.C.V.O., M.D., LL.D., F.R.C.P. Physician in Ordinary to His Majesty the King.

The Mortality of Alcoholism: By T. H. C. Stevenson, C.B.E., M.D., D.P.H. General Regular Office, Somerset House; late Secretary, Royal Statistical Society.

Alcohol in the Tropics: By Sir Leonard Rogers, C.I.E., M.D., F.R.C.P., F.R.C.S., F.R.S. Physician and Lecturer, London School of Tropical Medicine.

Two Suggestions Concerning the Alcohol Question: By Sir William Whitla, M.D., LL.D., D.Sc. Honorary Physician to His Majesty the King of Ireland.

Medical Notes on Alcohol: By Sir Thomas Horder, Bart., M.D., F.R.C.P. Physician in Ordinary to H.R.H. the Prince of Wales.

Treatment of Alcoholism: By Francis Hare, M.D. Medical Superintendent of the Norwood Sanatorium, Beckenham.

Alcohol from a Total Abstinence Point of View: By W. McAdam Eccles, M.D., F.R.C.S.

Very briefly, the conclusions reached seem to be:

1. That alcohol has a place in medicine.
2. That the social effects of its use are deleterious.
3. That, while alcohol has a certain definite food value, its use results directly in a lowering of efficiency.
4. That this drug plays a relatively small part in the production of certified insanity.
5. That the daily use of even small quantities of alcohol diminishes one's "expectation of life," as viewed by the insurance companies.
6. That the use of alcohol in the tropics is not only not beneficial, but is positively injurious.
7. That the use of light wines and beer is less harmful than that of spirits.
8. Alcohol diminishes a man's highest powers of performance and expression, and its limited possible value does not balance its dangers.

It may seem a peculiar proceeding to review a medical magazine as though it were a book, but this number really makes a good-sized book, and we know of no single publication where so much authoritative information on this subject is gathered together.

The Practitioner is published monthly at Howard Street, Strand, W.C. 2, London, yearly subscription price being two guineas. The price of the Special Alcohol Number is seven shillings and sixpence.

"ORGANOTHERAPY IN GENERAL PRACTICE"

Organotherapy in General Practice. Published by G. W. Carnrick Co., New York, N. Y. 1924. Price $2.00.

Leonard Williams has cleverly remarked that, in the immediate past of medicine, the microbe—the seed—has dominated the picture; but, in the future, the chief study will be devoted to the soil—the endocrines.

No progressive physician can today rest content or do all that is possible for his patient without a fairly broad, general knowledge of the work which has been and is being done in organotherapy.

The volume in hand appears to be a successful attempt to give the general practitioner a usable résumé, freed from all needless technical verbiage, of the present status of our knowledge of physiology and therapeutics of the ductless glands.

Each gland or system is treated in a separate chapter, and the whole field is covered.

The usefulness of the book is much increased by a therapeutic index, a graphic table of symptoms of hypo- and hyperfunction of the various glands and several photographs illustrating endocrine dystrophies.

BACON: "OBSTETRICAL NURSING"

Obstetrical Nursing. A Manual for Nurses and Students and Practitioners of Medicine. By Charles Sumner Bacon, Ph.B., M.D. Second Edition, Thoroughly Revised. Illustrated. Philadelphia and New York: Lea & Febiger. 1924. Price $2.75.

The city physician has at his disposal, and is in the habit of availing himself of, the service of competent nurses, but his country colleague is by no means always in the same favorable condition, and must frequently act not only in the capacity of accoucheur but also be his own obstetrical nurse.

The present volume is excellently adapted to the needs of such physicians, as well as to those of the nurse and student.

While the greatest emphasis is, of course, laid on the details of the care of the patient, before, during and after labor, a satisfying amount of space is devoted to purely scientific considerations, such as anatomy, physiology and the mechanism of conditions causing dystocia. Puerperal complications are also quite fully discussed.

This volume is well gotten up and illustrated, and can scarcely fail to be very valuable to all nurses and also to students and those practitioners whose time for study is so limited that a brief and accurate manual for quick and ready reference is a blessing.

ABDERHALDEN: "HANDBUCH DER BIOLOGISCHEN ARBEITSMETHODEN"

Abt. IV, Teil 5, 2. Hälfte, Heft 1. Technik der Blasenspiegeluntersuchung (Cystoskipie) und der Nierenfunktionsprüfung sonderlich unter Zuhilfenahme des Ureterenkatheterismux (funktionelle Nierendiagnostik). Otto Kneise.

Abt. IV, Teil 5, Heft 3. Untersuchungen des Harns: Die biogenen Amine im Harn. Markus Guggenheim und A. Hottinger.

Abt. IV, Teil 9, Heft 3. Stoffwechsel: Methodik des Energiestoffwechsels, Johansson; Untersuchung des Gesamtstoffwechsels des Säuglings, Langstein & Edelstein; Vergleichende Stoffwechseluntersuchungen am Menschen bei freigewählter Kost, Gigon; Aufzucht keimfreier Säugetiere, Küster.

Abt. IV, Teil 10, Heft 3. Methoden zur Bestimmung des Gaswechsels bei Tieren und Menschen. Francis G. Benedict.

Abt. V, Teil 5A, Heft 2. Theoretische Grundlagen der Gelenkmechanik, R. Grammel. Graphische Methoden zur Darstellung normaler und pathologischer willkürlicher Bewegungsabläufe, E. Hirt.

Abt. V, Teil 5B, Heft 3. Zentralnervensystem: Die Untersuchung der Reflexzeit, Hoffmann; Methoden zur Bestimmung der Reaktionszeit, Hoffmann.

Berlin und Wien: Urban & Schwarzenberg. 1924.

WHITNALL: "THE HUMAN ORBIT"

The Anatomy of the Human Orbit and Accessory Organs of Vision. By S. Ernest Whitnall, M.A., M.D. Illustrated. London: Henry Froude and Hodder & Stoughton. 1921. Price $12.00.

AMERICAN PROCTOLOGIC SOCIETY: TRANSACTIONS

Transactions of the American Proctologic Society; Twenty-fourth Annual Session held at Los Angeles, Cal., June, 1923. Illustrated. New York: Paul B. Hoeber, Inc. 1924. Price $3.00.

Medical News

SANOCRYSIN

Dr. P. C. Clemensen has just returned from Denmark, where he has been studying the work of Prof. Holger Moellgaard, of Copenhagen, in the treatment of tuberculosis with a gold salt and the serum of convalescents.

Copyright: Underwood & Underwood.
Dr. P. C. Clemensen.

On January 15, 1925, Dr. Clemensen made a report to the Chicago Tuberculosis Society (the first public report since his return), in which he stated that Prof. Moellgaard is an earnest disciple of Ehrlich, whose principles were used in making the present investigation.

Extensive animal experiments were made, prior to clinical application, using sodio-auro-thiosulphate, which may be given in doses of 1 Mgm. per kilo of body-weight, and which produces severe reactions in tuberculosis subjects, but none in normal persons.

Convalescent serum was administered in the later cases in order to supply the anti-bodies necessary to prevent tuberculous shock, with accompanying albuminuria.

Dr. Clemensen feels that, in Sanocrysin, we have a remedy which is as specific in tuberculosis as are the arsphenamines in syphilis; but Dr. Long, of the University of Chicago, while heartily urging a thorough investigation of the new remedy, recalled the long history of "specifics" for tuberculosis and warned against undue enthusiasm until such investigation has been made.

MEDICAL CORPS OF THE ARMY

The Surgeon General of the Army announces that there are 53 vacancies in the Medical Corps which are to be filled by the appointment of first lieutenants, Medical Corps, Regular Army, following examinations to determine qualification.

The pay of a first lieutenant is $2,000.00 a year, plus quarters for himself and family, heat, light and an allowance for food.

An excellent opportunity for travel and postgraduate instruction is also offered.

Full particulars may be obtained by addressing The Surgeon General, U. S. Army, Washington, D. C.

DOCTORS NEEDED IN MASSACHUSETTS

The State Department of Public Health of Massachusetts reports that there are 19 small towns in the state which are urgently in need of whole- or part-time medical service.

OPENING IN CALIFORNIA

An excellent opening is reported in California for a well-qualified and active physician who is willing to get into a country practice in a delightful locality, and *stay with it.*

If interested, address Dr. J. Tracy Melvin, Porterville, Calif.

RIPE OLIVES

The Bureau of Chemistry of the Department of Agriculture made a survey of the canned ripe-olive situation during the summer of 1924, the result of which is reported in the December number of the *American Journal of Public Health.*

Careful examination of 2,900 cans of olives which were obviously spoiled failed to show B. botulinus in any case.

If dealers will be careful not to sell, and consumers not to eat, any ripe olives which are mushy, have an objectionable odor or show any other easily noted signs of decomposition or spoliation, no danger need be feared from this food.

MEDICAL SCHOLARSHIPS

Scholarships on the Oliver-Rea Foundation for graduate study in medicine are available at the New York Post-Graduate Medical School and Hospital. Inquiries should be addressed to the Dean, 301 East Twentieth Street, New York City.

IMPORTANT APPOINTMENT

Dr. Curran Pope, of Louisville, was recently appointed to the Kentucky State Board of Charities and Corrections.

U. S. CIVIL SERVICE EXAMINATIONS

United States Civil Service Examinations will be held in the near future for the positions of Physiotherapy Aide and Assistant; Graduate Nurse; and Dietitian.

Full information and application blanks may be obtained from the United States Civil Service Commission, Washington, D.C., or the secretary of the board of U. S. Civil Service examiners at the post office or customhouse in any city.

BUREAU OF CHEMISTRY TO INVESTIGATE REPORTS OF TYPHOID FROM RAW OYSTERS

Commenting on the press reports regarding cases of typhoid fever which are said to have occurred in New York and Chicago and which are believed to have been caused by the consumption of raw oysters, the officials of the Bureau of Chemistry, United States Department of Agriculture, charged with the enforcement of the Federal food and drugs act, have stated that their knowledge of the typhoid situation is at present limited to the press reports, but that immediate steps were taken following the publication of the items to secure authentic information from the health authorities of both New York and Chicago.

"At the opening of the oyster season, very extensive investigations were made by the Bureau of Chemistry for the purpose of ascertaining the sanitary character of the oysters which are being shipped in interstate commerce," said the food officials. "It is a recognized fact that sanitary precautions of a rigid character must be observed in the handling of oysters to preclude the possibility of pollution, and the investigation made in the early season was instituted for the purpose of making sure that such precautions were being observed.

"The most hearty cooperation was received from the State authorities of New York, Connecticut, Rhode Island, New Jersey, Delaware, Maryland and Virginia, which are the important oyster-shipping states of the Atlantic seaboard. All of these states are enforcing regulations of such character as would appear to insure the wholesomeness of oysters shipped in interstate commerce. Whether, in spite of the precautions taken, there has been some negligence on the part of an individual shipper which has been responsible for outbreaks of typhoid, it is impossible to state until the information now being sought from the responsible health authorities in New York and Chicago is secured."

ANNEX TO JEFFERSON HOSPITAL

The Samuel Gustine Thompson Annex to the Jefferson Hospital was dedicated, with impressive ceremonies, on October 30, 1924, "To the Glory of God, the Relief of Human Suffering and the Saving of Precious Lives."

Send for This Literature

To assist doctors in obtaining current literature published by manufacturers of equipment, pharmaceuticals, physicians' supplies, foods, etc., CLINICAL MEDICINE will gladly forward requests for such catalogues, booklets, reprints, etc., as are listed from month to month in this department. Some of the material now available in printed form is shown below, each piece being given a key number. For convenience in ordering, our readers may use these numbers and simply send requests to this magazine. Our aim is to recommend only current literature which meets the standards of this paper as to reliability and adaptability for physicians' use.

Both the literature listed below and the service are free. In addition to this, we will gladly furnish such other information as you may desire regarding additional equipment or medical supplies. Make use of this department.

N- 22 Biological Products for Human Use. With Indications for Use, Dosage, Price List, etc. Gilliland Laboratories.

N- 30 Helping the Cell to Help Itself. 32-page booklet. The Alkalol Co.

N- 34 The Care and Feeding of Infants. 60-page booklet. Mellins Food Co.

N- 51 Treatment of Syphilis. 32-page booklet. Dermatological Research Laboratories.

N- 58 A Symposium on Yeast. 24-page booklet. The Fleischmann Co.

N- 65 Intestinal Infections of Children. 14-page booklet. Battle & Co.

N- 69 Gonosan. 4-page folder.. Riedel & Company.

N- 71 Goiter Special. 4-page folder. Columbus Pharmacal Co.

N- 80 Allonal "Roche." The Non-Narcotic Hypnotic and Analgesic. 8-page booklet. Hoffman-LaRoche Chemical Co.

N- 84 Storm Binder and Abdominal Supporter. 4-page folder. Dr. Katherine L. Storm.

N- 92 New Light on an Old Remedy. 12-page booklet. Century National Chemical Co.

N-103 Therapeutic Use of Chlorine in the Treatment of Respiratory Infections. No. 61. 8-page folder. Wallace & Tiernan.

N-104 Petrolagar (Deshell). What It Is. 8-page booklet. Deshell Laboratories.

N-134 Chinosol—Non-Poisonous Antiseptic. 32-page booklet. Parmele Pharmacal Co.

N-160 Clinical Reports on Cito. 8-page booklet. Chlorine Products Co.

N-194 Ninth Edition of Electro Surgical Instrument Co. catalogue. 80 pages.

N-198 Pluto Water. Its Medicinal Values. 16-page booklet. French Lick Springs Hotel Co.

N-207 McDannold Surgical and Gynæcological Chair. Descriptive folder. A. McDannold.

N-211 Fibrogen. 8-page booklet. Wm. S. Merrell Co.

N-217 A Modern Reconstructive Tonic. 4-page folder. Carroll Dunham Smith Pharmacal Co.

N-220 Diet Series. Constipation. 4-page folder. Kellogg Company.

N-231 Instant Relief for Cold in the Head and Sore Throat, Hayfever and Summer Colds. 4-page folder. Schoonmaker Laboratories.

N-233 The New Antiseptic Dye Acriflavine. 12-page booklet. Pitman-Moore Co.

N-235 Constipation. Its Rational and Physiological Treatment. 4-page folder. Wm. R. Warner & Co., Inc.

N-237 Information for the Medical Profession about Bovinine. 36-page booklet. The Bovinine Company.

N-238 Ethical Medicinal Specialties. 8-page booklet. A. H. Robins Co.

N-239 The Treatment of Sexual Impotence. 16-page booklet. Astor Chemical Corp.

N-243 Useful Information for the Nurse. 24-page booklet. Chas. H. Phillips Chemical Co.

N-249 A Sinusoidal Manual, by T. C. Cornell, M.D. 54-page booklet. McIntosh Electrical Corp.

N-255 Lunosol, by Herman Hille, Ph.D. 16-page booklet. Hille Laboratories.

N-261 Causes and Effects of Pyorrhea. 32-page booklet. Dentinol & Pyorrhocide Co., Inc.

N-265 Diatussin in Pertussis Bronchitis Asthma. 4-page folder. Ernst Bischoff Co., Inc.

N-268 Supporters, Trusses and Elastic Bandages. 16-page booklet. Hall & Cary Weaving & Belting Co.

N-271 Pharmaceutical Preparations of Established Merit. 11-page booklet. E. Bilhuber, Inc.

N-293 Clinical Data and Case Reports on the Intravenous Infection of Calcium in the Treatment of Tuberculosis. New York Intravenous Laboratory.

N-301 Price List. 236-page booklet. Sharp & Dohme.

N-306 Letters-in-Evidence from Physicians. Philo Burt Manufacturing Co.

N-307 Modern Aspects of Syphilis. 16-page booklet. Battle & Co.

N-309 The Journal of Organotherapy. 95-page booklet published monthly. G. W. Carnrick Company.

N-310 Practical Gastro-Enterology. 16-page booklet. Nujol Laboratories.

N-311 The Cure of Cystitis, Pyelitis and Other Inflammatory Conditions of the Urinary Tract.

N-312 The Successful Treatment of Goiter. 15-page booklet. Burnham Soluble Iodine Co.

N-313 Glorified Petrolatum. 4-page folder. Dionol Company.

N-316 The Bacillus Acidophilus. 16-page booklet. Arlington Chemical Co.

N-317 Endocrine and Other Organotherapeutic Preparations. 32-page booklet. Armour & Co.

N-318 Borcherdt's Malt Sugar. 4-page folder. Borcherdt Malt Extract Co.

N-319 Seventh Edition 1924 Catalog. 239-page booklet. Geo. A. Breon & Co.

N-328 Internal Bathing. 4-page folder. Huston Bros. Company.

N-332 Sun-Aero Hair Dryer. 6-page folder. William Meyer Company.

N-341 Collodaurum. Circular. Ideal Skin-Suture Material Company.

N-342 Fleischer Spinal Manometer. 8-page folder. Becton, Dickinson Co.

N-343 Clinical Provings. 12-page booklet. Burdick Cabinet Co.

N-344 Rheumatism Sero. 4-page folder. California Endocrine Foundation Laboratories.

N-346 Campho-Phenique Ointment. 4-page folder. Campho-Phenique Co.

N-347 Treatment of a Case of Sterility and Frigidity. 4-page reprint. Cavendish Chemical Corp.

N-348 Simple Goiter. 4-page folder. Ciba Company.

N-349 Acute Indigestion. 6-page folder. Drug Products Co.

N-350 Dry Milk in Infant Feeding. 15-page booklet. Dry Milk Co.

N-351 Alkalinizing Apparatus — Bulletin No. 291. Folder. Eimer & Amend.

N-352 An Industry Grown Great Through Service. 22-page booklet. H. G. Fischer & Co.

N-353 Fraisse Ampoules. 8-page folder. E. Fougera & Co.

N-354 Mucous Colitis, by Henry R. Harrower, M.D. 14-page booklet. Harrower Laboratory.

N-355 Pil. Mixed Treatment (Chichester). 4-page folder. Hillside Chemical Co.

N-356 Horlick's Malted Milk as a Diet in Influenza-Pneumonia. Horlick's Malted Milk Co.

N-357 Alpine Sun and Kromayer Quarts Lamps. 21-page booklet. Hanovia Chemical Co.

N-359 Ichthyol, Its Use in Skin Diseases and in Minor Surgery. 91-page booklet. Merck & Co.

N-360 Sex and Sex Worship, by O. A. Wall, M.D., Ph.G., Ph.M. Folder. C. V. Mosby Co.

N-361 The Pit-Mor-ian. Pamphlet. Pitman-Moore Co.

N-362 How I Make Postum, by Carrie Blanchard. 8-page booklet. Postum Cereal Co.

N-363 Medical Pocket Quarterly. 24-page booklet. Reed & Carnrick.

N-364 Sanborn Technical Bulletin. 10-page booklet. Sanborn Co.

N-365 Urotropin. Folder. Schering & Glatz.

N-366 Steiner Aeroizer. Folder. J. Sklar Manufacturing Co.

N-367 Arsphenoids. Folder. Swan-Myers Company.

N-368 A Laboratory Course in Physiotherapy. Folder. Victor X-Ray Corp.